

THE ULTIMATE iPad HANDBOOK

180
PACKED PAGES

The *only* guide you need to get more from your Apple tablet



iOS 9 IN-DEPTH!

- Master Split View
- Core apps explained
- Discover iCloud & Apple Music



THE ULTIMATE **iPad** HANDBOOK

The *only* guide you need to get more from your Apple tablet

THE ULTIMATE iPad HANDBOOK

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Welcome!

... to your ultimate Apple tablet guide – whichever iPad you choose, this manual is for you



Apple unveiled its first iPad back in 2010 and in the intervening years we've seen each new version of the device improve on the last, as well as the introduction of a range of iPads to cater for every

personal preference. Whether you're the proud owner of a new iPad or you've yet to decide which device to plump for, this guide is for you.

The first section will help you work out which iPad fits your needs and show you just what's new and exciting in Apple's latest touch-based operating system, iOS 9. After that, we'll reveal all the ways you can interact with your new iPad, from using multi-touch gestures to securing your device with the built-in Touch ID

technology on the very latest iPads. We'll also help you master your iPad's settings and show you around its on-screen keyboard, before introducing you to the world of the App Store.

Next up we'll explore your iPad's core apps such as Mail, Contacts and Calendar, and guide you through the process of setting up reminders so you never forget a thing. You'll learn how to message friends straight from your device and how to surf the web like a pro. Then we'll look at the many ways to enjoy your favourite media – and even reveal how you can talk to your iPad.

Finally, we'll show you how to get creative, whether that means taking great pictures or making music. There's so much to explore with an iPad, so turn the page and let's get started.

Tim Hardwick, Editor

The **ULTIMATE HANDBOOK** Manifesto

Ultimate Handbooks are designed to give you a complete guide to a device or piece of software you own. We aim to help you get more from the products you love and we guarantee you'll get the following from each book...

- A reference guide you can keep on your desk or next to your computer and consult time and time again

when you need to know how to do something or solve a problem

- New skills you can take with you through your life and apply at home or even in the workplace
- Expert advice to help you do more with your hardware and software – from solving new problems to discovering new things to try out,

we'll show you the best ways to do everything

- Clear recommendations for other products, accessories and services you can use with your device or software to get the best possible results
- Advice you can take everywhere thanks to the free digital edition of this book – see page 178 for more details

How are we doing? Email techbookseditor@futurenet.com and let us know if we've lived up to our promises!

THE ULTIMATE
iPad
HANDBOOK

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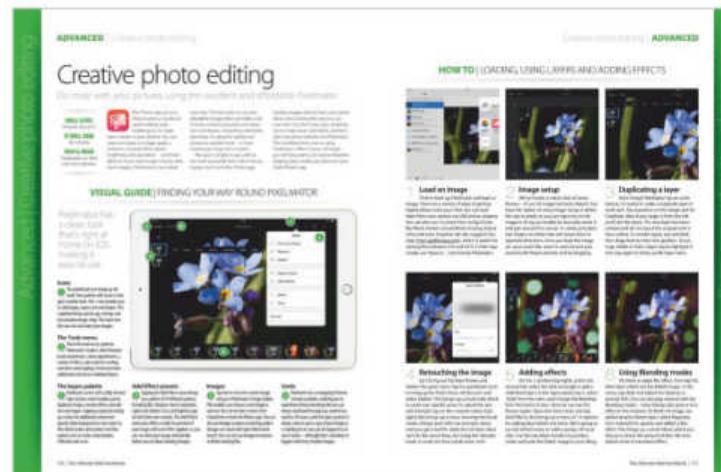
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Which iPad?

From the gorgeous, powerful iPad Air 2 to the compact, affordable iPad mini 2, there's an iPad model to suit every need and budget



iPad Air 2

Model iPad Air 2 Wi-Fi (add £100 for Wi-Fi + 4G Cellular model)

Key specifications **Display** 2048x1536 9.7-inch laminated anti-reflective Retina Chip A8X with M8 motion coprocessor **Cameras** 1.2MP FaceTime (front) 8MP iSight (rear) **Touch ID** Fingerprint sensor **Connectivity** Lightning port, 802.11ac Wi-Fi, Bluetooth 4.2, 3.5mm headphone socket **Battery life** Up to 10 hours

Price 16GB: £399 64GB: £479 128GB: £559

Don't be fooled by the iPad Air 2's ultra-slim body, inside it's a veritable portable powerhouse with plenty of oomph for watching HD videos from iTunes and playing the latest iOS games. Its large 9.7-inch Retina display is gorgeous to look at too and the iPad Air 2 supports all the latest iOS 9 features including split-screen viewing for multi-tasking, Touch ID and even Apple Pay. Step up to the Wi-Fi + Cellular model and you'll be able to enjoy fast 4G mobile broadband – perfect for staying in touch wherever you go.



iPad Air

Model Wi-Fi (add £100 for Wi-Fi + 4G Cellular model)

Key specifications Display 2048x1536 9.7-inch Retina Chip A7 with M7 motion coprocessor **Cameras** 1.2MP FaceTime (front) 5MP iSight (rear) **Touch ID** none **Connectivity** Lightning port, 802.11a/b/g/n Wi-Fi, Bluetooth 4.0, 3.5mm headphone socket **Battery life** Up to 10 hours

Price 16GB: £319 32GB: £359

The previous generation iPad Air may not have the Touch ID or fully laminated screen of its successor, but it's still incredibly capable. Key features include a super-slim lightweight body and, of course, that gorgeous 9.7-inch Retina display, and you can still enjoy all the benefits of iOS 9 – and all the apps and games available from the iTunes App Store. Available in Wi-Fi-only and Wi-Fi + Cellular models, it's ideal for sofa-surfing or working on your latest project. It's also a great way for you to enjoy all your favourite movies, TV shows and songs, which may be the most important thing for you.

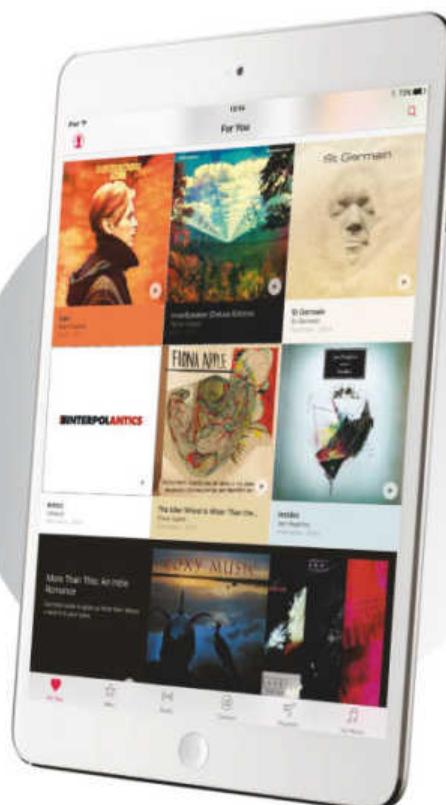
iPad mini 4

Model iPad mini 4 Wi-Fi (add £100 for Wi-Fi + 4G Cellular model)

Key specifications Display 2048x1536 7.9-inch laminated Retina Chip A8 with M8 motion coprocessor **Cameras** 1.2MP FaceTime (front) 8MP iSight (rear) **Touch ID** Fingerprint identity sensor in Home button **Connectivity** Lightning port, 802.11ac Wi-Fi, Bluetooth 4.2, 3.5mm headphone socket **Battery life** Up to 10 hours

Price 16GB: £319 64GB: £399 128GB: £479

If you like to travel super-light, the iPad mini 4 is the ideal go-anywhere companion. It has a slightly smaller 7.9-inch Retina display compared to the iPad Air 2, but still retains virtually all of its bigger sibling's killer features, thanks to a powerful A8 processor, plenty of storage in 64GB and 128GB guises and, of course, iOS 9. Naturally the iPad mini 4 also includes Touch ID fingerprint recognition technology to help keep it secure and there's a Wi-Fi + Cellular version for 4G ready mobile mavens. And it only weighs 299 grams.



iPad mini 2

Model Wi-Fi (add £100 for Wi-Fi + 4G Cellular model)

Key specifications Display 2048x1536 7.9-inch Retina Chip A7 with M7 motion coprocessor **Cameras** 1.2MP FaceTime (front) 5MP iSight (rear) **Touch ID** none **Connectivity** Lightning port, 802.11a/b/g/n Wi-Fi, Bluetooth 4.0, 3.5mm headphone socket **Battery life** Up to 10 hours

Price 16GB: £219 32GB: £259

You don't have to spend a fortune to get an iPad these days – and the iPad mini 2 is a case in point. True, it doesn't have all of the latest features like the iPad Air 2 or iPad mini 4, but it's still armed with a lickable 7.9-inch Retina display, powerful A7 processor and enough storage for school and work projects and even your favourite games. Perfect for younger members of the family, it's a worthwhile alternative to low-cost Android tablets – and it comes with all the ease of use you'd expect from Apple and iOS 9.



Introducing iPad Pro

If you need to get down to serious work, whether of the office or creative varieties, you'll want Apple's biggest, most powerful iPad

Apple's latest iPad, announced in September 2015 and on sale since mid-November, sports the biggest display of all iOS devices at 12.9 inches. The iPad Pro's screen has the same 4:3 aspect ratio as other models, yet its display resolution is much higher than the regular iPad and the iPad mini; its 2732x2048 pixels ensure images and text are rendered as sharply as other Retina displays. The iPad Pro's combination of screen size and resolution also makes it the best

model for using Split View, a new feature of iOS 9, which enables you to use two apps side by side.

The iPad Pro also sports great features such as Touch ID for security, AirPlay for streaming video and audio to speakers or Apple TV, and built-in cameras for photography and video calls. However, it has a couple of exclusive accessories that make it stand out: the Apple Pencil (£79) for creative work, and the Smart Keyboard (£139) for any task that requires extensive typing while maximising available screen space.

The Smart Keyboard doubles as a stand for the iPad Pro. It's a full-size keyboard too, and you don't need to plug it in because aligning it to the iPad Pro's Smart Connector – three circular connectors – provides power and data connections.

Meanwhile, the Apple Pencil will stir your creativity thanks to pressure sensitivity that enables you to vary line thickness and tilt detection for adding shading to sketches. You can use the Apple Pencil for anything from drawing diagrams to crafting detailed digital paintings.

1 Connectivity

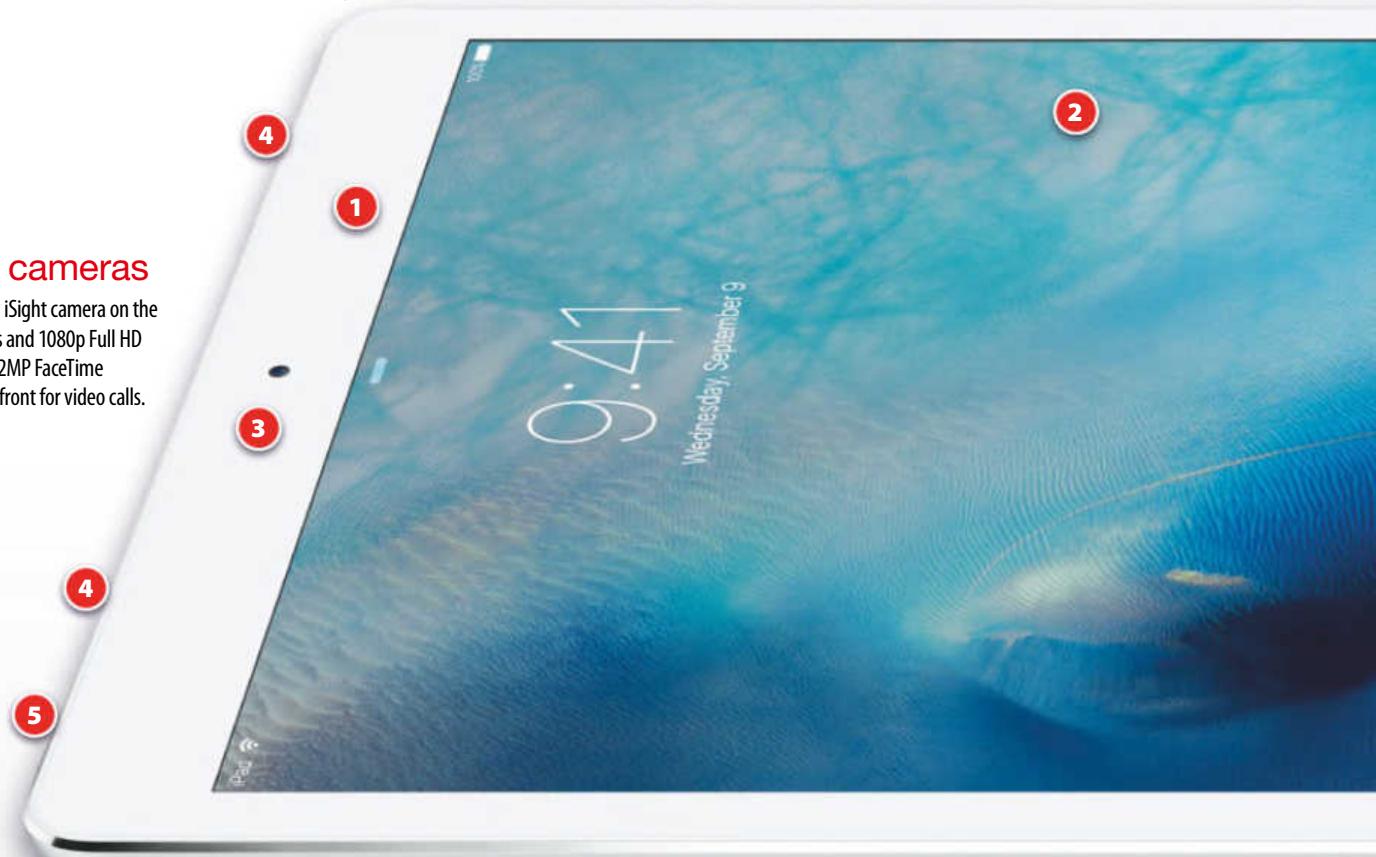
There are 32GB and 128GB models with 802.11ac Wi-Fi, and a separate 128GB model that adds mobile data connectivity.

2 Energy saving

This is the first iPad screen with a variable refresh rate, saving power when showing static content.

3 Built-in cameras

There's an 8MP iSight camera on the back for photos and 1080p Full HD video, plus a 1.2MP FaceTime camera on the front for video calls.



4 Stereo sound

The iPad Pro comes with two pairs of speakers (top and bottom), so you can enjoy music and video in stereo – no matter which way around you hold the device.

5 Audio output

Like all iOS devices, the iPad Pro comes with a 3.5mm headphone socket for private listening.

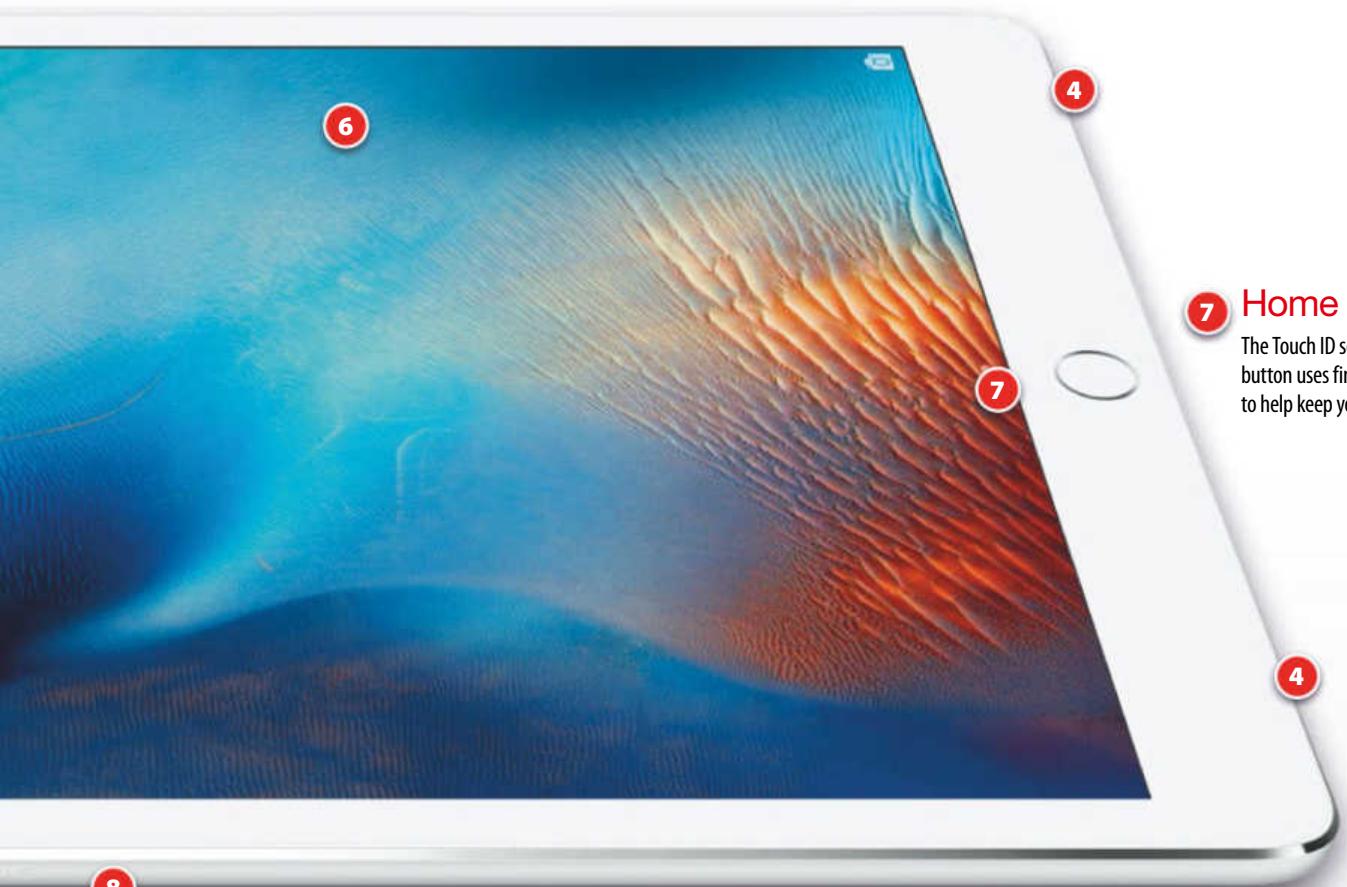
Apple Pencil

The Apple Pencil and the iPad Pro's display are intimately linked; the iPad can tell the difference between the touch of your fingers and contact from the Pencil. When it detects the latter, it scans at 240 times per second, doubling the amount of data it collects. The latency between you drawing on the screen and the app you're using showing the result of your input is tiny. It's this that makes these two tools a great pair for digital art.



⑥ Processing power

The iPad Pro's A9X is Apple's most advanced and most powerful processor in an iOS device.



⑧ Smart Connector

The iPad Pro comes with a unique Smart Connector in the middle of its left side for powering the optional Smart Keyboard.

A visual guide to the iPad

Get to know the ins and outs of Apple's iconic tablet design



Headphone jack

The 3.5mm stereo headphone jack lets you plug in **6** any standard headphones to watch or listen in privacy. Headphones with in-line mics are supported for making FaceTime calls or recordings.

Stereo speakers

The iPad Air and mini models offer stereo speakers on **7** the bottom of the device (in portrait position). They're great for just watching some light TV and movies on the go, but are no replacement for a proper speaker setup.

Lightning connector

This single port is how you charge the iPad from a **8** mains plug, as well as how you connect it to a PC or Mac for syncing with iTunes, if you choose to do so. All iPads come with the connection cable and mains charger.

Rear camera

Depending on iPad model (see page 10), the rear **9** camera takes up to 8-megapixel still images, and records video in 1080p. Images are higher quality than the front camera's, but there's no flash.

Wi-Fi/3G/4G/Bluetooth

Apple's iPads include wireless connectivity in the form **10** of Wi-Fi and Bluetooth, as well as the option of 4G fast mobile broadband on the Wi-Fi+Cellular models. This white panel is the 4G aerial on the iPad Air 2.

Microphones

Apple's iPads include two microphones – one facing **11** to the rear, for better sound when recording video, and one on the side. The two are used together for better noise reduction technology, giving clearer results.

Volume

These volume controls let you easily change the **12** volume on whatever speakers you're listening to – the iPad's, headphones or anything else. You can also press the volume-down button for a second to mute the iPad.

SIM card slot (4G version only)

On the Wi-Fi+Cellular iPad models, which have built-in **13** 4G mobile broadband, this is where you'll find the Apple SIM (UK and US iPad's only). The Wi-Fi-only models don't include a SIM card slot or 4G aerial at all.



New features in iOS 9

Use two apps in tandem and make multitasking a reality on your iPad

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iOS 9, read on to discover device requirements



As well as the App Switcher that's available on all iPads, iOS 9 adds three new multitasking features:

Slide Over for quickly dipping into another app for a moment; Split View for working in two apps side by side; and Picture in Picture for playing video in a corner of the screen while you continue to work on something else.

Video even keeps playing in its little box as you swap between other apps.

As well as iOS 9, these features require certain models of iPad hardware. For Slide Over and Picture in Picture, you'll need an iPad Air or Air 2, an iPad mini 2 or later, or an iPad Pro. Split View is more demanding because it requires enough resources for two apps to run at the same time and remain responsive. So,

for that feature you'll need an iPad Air 2, an iPad mini 4 or an iPad Pro.

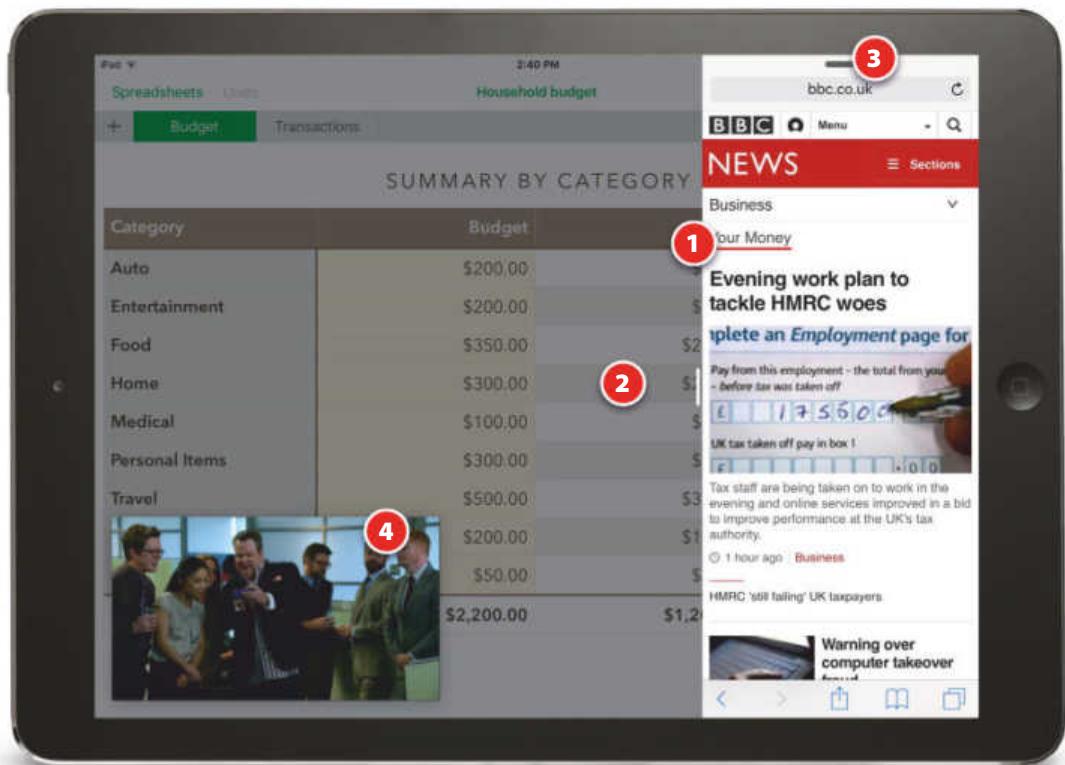
In fact, if your iPad falls in the latter group, it's powerful enough to run Split View and Picture in Picture at the same time, essentially splitting your attention between three things. Note that not every online video or app – whether part of iOS or downloaded from the App Store – supports these features.

VISUAL GUIDE | ADVANCED MULTITASKING

Focus your attention on two apps, or split it by tucking video in a screen corner

Slide Over

1 When you drag in from the right edge of the screen, from around its vertical centre, a narrow view of another app will slide into view. The app is likely to look a little different to when you're using it full-screen due to having to reformat itself for a narrow column. However, Slide Over is intended to enable you to attend to things that are quick and simple to accomplish, so you can quickly get back to work in the app you were already in, which remains open and visible on the left side of the screen. This mode can work well with your iPad held in portrait or landscape orientation.



Split View

2 Look out for this short vertical line to the left of Slide Over's pane. Hold a finger on it and then drag it left to switch the two visible apps to Split View, which keeps both of them open. This tends to work much better with your iPad in landscape orientation because of the amount of horizontal space that working in two apps often requires. However, you might still find portrait orientation useful in a scenario such as when using the Notes app

as you research using a long web page or a book on the other side of the screen.

Switch the right app

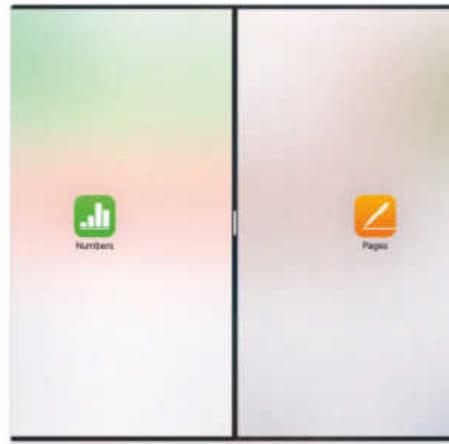
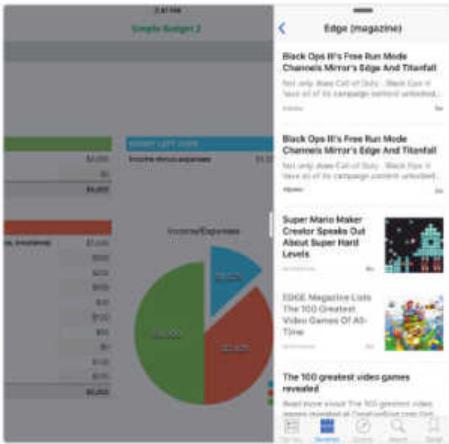
3 In either Slide Over or Split View, drag a finger down from the very top of the right-hand pane to change the app that's displayed on that side of the screen.

Picture in Picture

4 You can play a single video in a Picture in Picture box while continuing to use another app – or two in Split View – behind. If the video is covering up something you need to interact with, just swipe it out of the way to another corner of the screen, or flick it off the edge

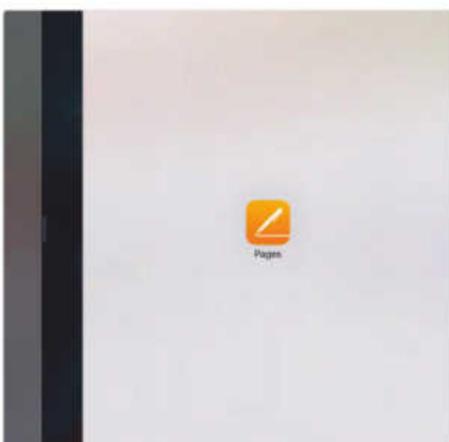
of the screen to temporarily hide it. Not every video can be displayed in this way, but you can play any film, TV show or music video from the Videos app. Expect more online videos to support it as time goes on and an increasing number of sites adopt HTML5 for video playback. Not all third-party video apps work with it, though.

HOW TO | USE iOS 9'S MULTITASKING ENHANCEMENTS



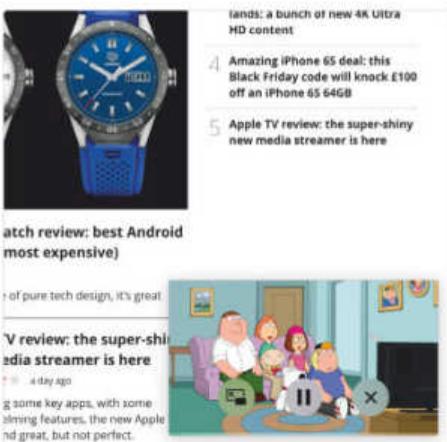
1 Dip into a second app

Slide Over enables you to quickly attend to something in another app without closing the one you're using. Not every app supports it, yet many that come with iOS do – including Safari, Mail and Calendar. Swipe in from the right edge of the screen's vertical centre (otherwise you might trigger a feature of the app you're using, such as going forwards in your browsing history in Safari). At other times, such as in games, only a small tab will appear at the right edge of the screen; drag inwards from it.



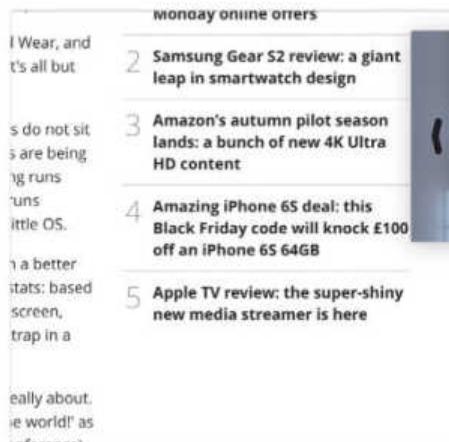
2 Choose an app to show

To change the app that's displayed in the right-hand pane, swipe down from the top of the screen within that pane. This will reveal a list of apps you can switch to, or (depending on the type of app already there) a small tab with an arrow pointing down in it; if you see the latter, swipe down from the tab to reveal the list. Swipe vertically in the pane to scroll through the list, then tap the one you want to use. To finish using Slide Over, tap the app on the left and the right one will slide out of view.



3 Use two apps at once

Split View enables you to work in two apps side by side. (Again, it doesn't work for every app.) After swiping in from the right to reveal Slide Over, drag left from the short vertical line that's just next to the right pane. The two apps will be temporarily blurred, with their icons and names shown instead. Let go and both apps will be pinned open, enabling you to use both together. This usually works best when holding your iPad in landscape orientation to benefit from extra screen width.



4 Exit Split View

Just like in Slide Over, drag a finger down from the top edge of the app on the right to choose a different app to display there. To exit Split View, place a finger on the handle in the divider between the two apps, then drag in the direction of the the app you want to hide, most of the way to the edge of the screen, and let go when that app becomes dimmed. Note that if you don't drag far enough, you'll find with some apps that you can adjust how much screen space is allocated to each one.

5 Picture in Picture

Picture in Picture enables you to play video in a box in any corner of the screen while you use the remaining space for something else. Tap a video within an app to display its playback controls, then tap the one that shows a large rectangle with an arrow inside, pointing to a smaller rectangle. That button is available when using the Videos app, when playing web video in Safari (where sites have implemented it using HTML5), and in other apps that use the facilities built into iOS to play video.

6 Full-screen video

If your video is in full-screen mode, double-tapping it with two fingers switches it to Picture in Picture mode. Repeat on the video to switch back, or tap once with one finger for additional options to close or pause playback. Pinch (or spread apart) two fingers on the video to adjust its size. You can move it to any screen corner. Hide it temporarily by flicking it off the left or right of the screen; the small tab that remains can still be moved around, or just tap or swipe inwards from it to see the video again.



44 iOS 9 TIPS

Check out these brilliant new features and improvements that make your iPad running iOS 9 a pleasure to use

Search in Settings

1 At the top level of Settings is a search bar. Type something into it to get a list of matching settings, including the path to reach them, although you can just tap an item to jump straight to it.

Deal with bad Wi-Fi

2 If Wi-Fi Assist is switched on at the bottom of Settings > Mobile Data, iPads with mobile connectivity will fall back on your mobile network when the Wi-Fi network you're using is of poor quality.

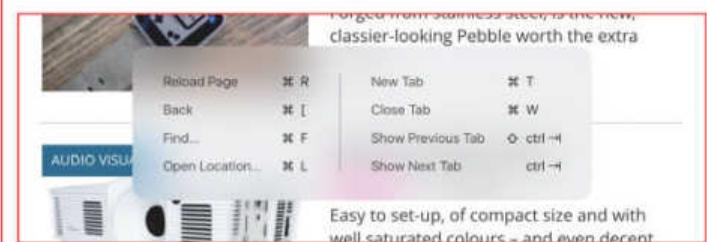
On-screen keyboard

3 The on-screen keyboard in iOS 9 gives a helpful visual cue: letters on it change to reflect the case in which you're typing. The top row of the iPad's keyboard contains shortcuts to features such as copy and paste, undo/redo, formatting controls and buttons to attach photos and items in iCloud Drive in apps such as Mail.

If you prefer, the keyboard can be set to show capitals by disabling Settings > General > Accessibility > Show Lowercase Keys. You can then tell the case you'll type in by the Shift key's colour.

Bluetooth keyboards

4 When using a Bluetooth keyboard, the shortcuts bar still appears at the bottom of the iPad's screen, along with an option to hide it. When you



If you prefer to use a Bluetooth keyboard for writing, the experience is much improved now that you can look up common shortcuts. There's a Mac-inspired method for switching apps, too.



Broadly useful new accessibility settings

5 Accessibility features (in Settings > General) have been expanded with useful switches that disable features that might get in your way. You can turn off the Shake to Undo gesture, which you might find is too easily triggered.

Touch Accommodations are intended to assist people with motor difficulties, but you might find them useful for very young children. You can adjust how long the screen must be touched before an action is triggered, treat multiple touches within a duration as one, and set whether a finger's location when it touches or leaves the screen determines your intention.

Text insertion

6 Positioning the insertion point is really easy on the iPad. Hold two fingers on the on-screen keyboard and the keys become greyed out. A blue vertical bar appears at the insertion point's current location, and you can move it like you would with a mouse or trackpad on a computer by sliding both fingers around the screen; the insertion point will follow. Lift your fingers to finish.

Choose Siri's accent

7 Until now, the language you selected for Siri would determine its accent in addition to guiding its expectation of how you say words – but not

anymore! If you prefer to have it speak to you in a North American or Australian accent, you can choose that in Settings > General > Siri > Siri Voice, which replaces the simpler Gender setting from iOS 8.

Text to speech

8 If you use iOS's ability to read out text that's selected, new voices can be found in Settings > General > Accessibility > Speech > Voices.

New actions

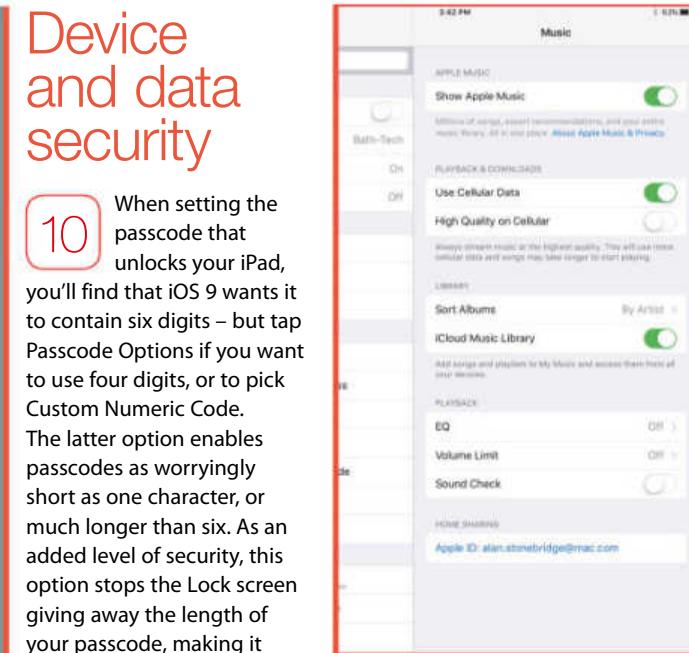
9 New Share sheet actions for dealing with email attachments enable you to save to iCloud Drive, or to use Markup to annotate PDFs and images and return them by reply.

Device and data security

10 When setting the passcode that unlocks your iPad, you'll find that iOS 9 wants it to contain six digits – but tap Passcode Options if you want to use four digits, or to pick Custom Numeric Code. The latter option enables passcodes as worryingly short as one character, or much longer than six. As an added level of security, this option stops the Lock screen giving away the length of your passcode, making it harder for people to guess as what is entered is submitted only when OK is tapped.

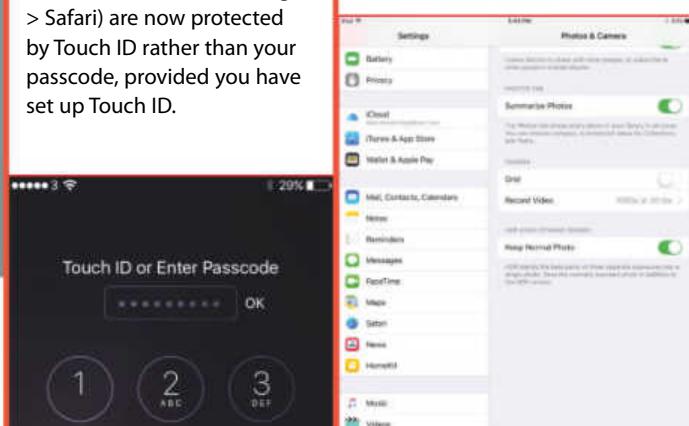
In Settings > General > Auto-Lock is a new, more secure option that locks your device after just 30 seconds.

Your website accounts and saved bank cards (in Settings > Safari) are now protected by Touch ID rather than your passcode, provided you have set up Touch ID.



Music

11 On iPads with a mobile data connection, you can choose to stream your purchases and Apple Music in high quality in Settings > Music. Consider disabling it to conserve data.



Camera

12 In Settings > Photos & Camera, you can choose the resolution in which video is recorded. On that page, tap Record Video to choose from the available qualities: 720p or 1080p on the most recent iPads. The page also gives some guidance about roughly how much space a minute of footage at each quality will take up. (Remember, you can check the amount of free storage available is shown by going to Settings > General > About.)

When setting a passcode, six digits is now the default length. Additional options enable codes of arbitrary length. Picking Custom Numeric Code makes it even harder for your passcode to be guessed.

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Search and Safari

Two important features are now more powerful than ever before

Proactive suggestions

13 Where you previously had to type before Spotlight Search showed anything, iOS 9 proactively assesses what you do and when, and uses that to display things you might need right now. The search page also displays online news for your location.

Newly searchable

14 Many more kinds of item show up in iOS 9's search results. Go to Settings > General > Spotlight Search and you'll see many more built-in apps are listed, including iBooks, Health and Wallet. Third-party apps from the App Store are listed, too. In fact, the rather long list is indicative of a new capability Apple has placed in the hands of developers, who can

make their apps' contents searchable in Spotlight. If you see unwanted kinds in search results, you can hide them here. However, you can no longer rearrange the list to prioritise things.

Disable proactivity

15 If you prefer not to see Spotlight's proactive suggestions, they can be disabled in Settings > General > Spotlight Search. Switch off Siri Suggestions at the top of that page.

Dictate your terms

16 There's now a microphone icon at the right-hand side of Spotlight's search bar, which enables you to say what it is you're looking for. This is available even if iOS's Dictation

feature is off in Settings > General > Keyboards (which is ordinarily triggered from a key on the keyboard wherever you can type).

Perform calculations

17 You needn't download a calculator app to perform basic arithmetic because you can run numbers in Spotlight Search – just like you already could in Spotlight on a Mac. Type a calculation into the search bar, using * for multiply and / for divide. Try using common functions too – for example, sqrt(144).

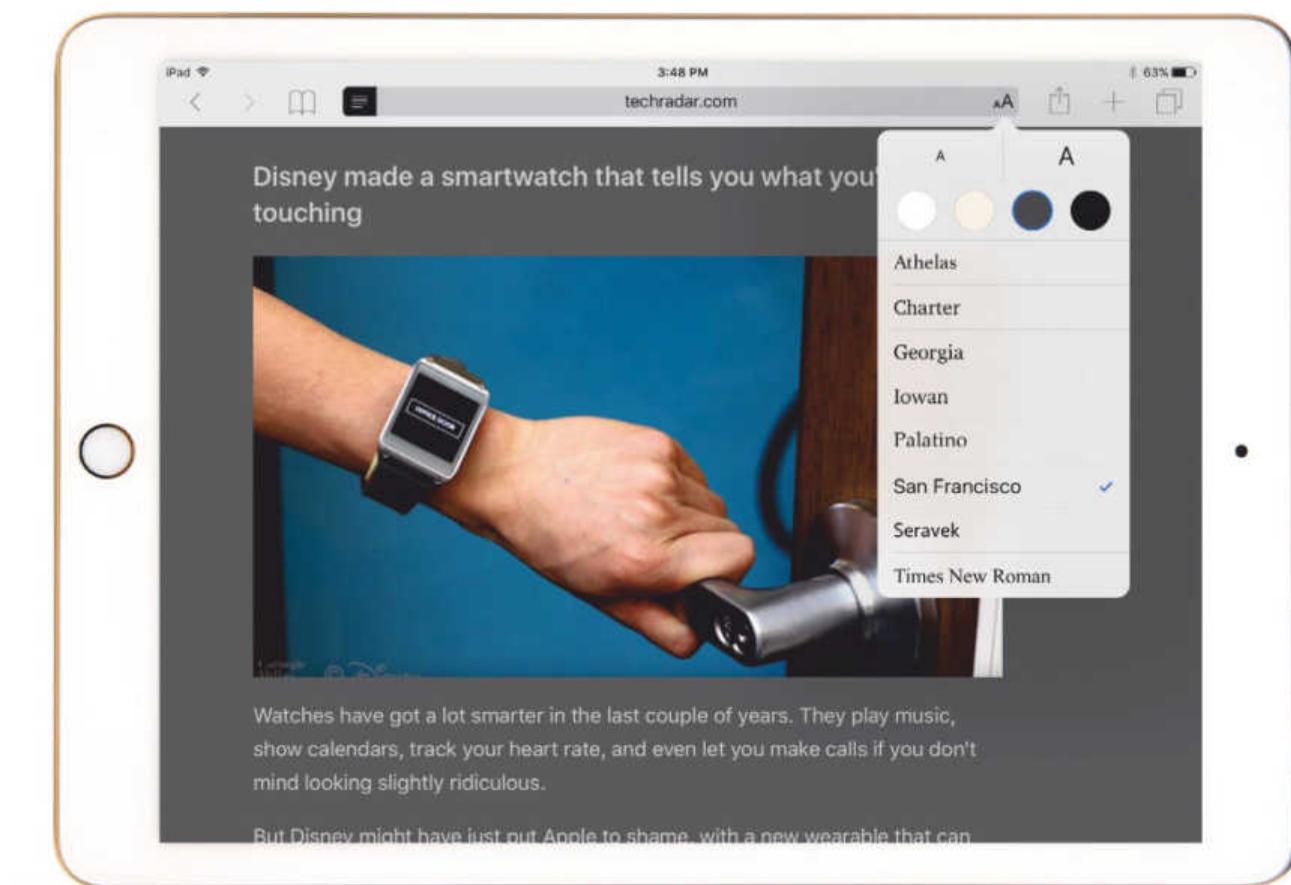
Accessing Search

18 You can access the system-wide search feature in two ways: by swiping to the left of the first Home

screen, or swiping downwards on any page of that screen. There's a difference to note in what you get from each route. The latter one opens the search page with the input focus already in the search bar and the keyboard visible for you to type what you want, and a list of suggested apps even before you type – but nothing more until you do. Use the former route if you want to see iOS's proactive suggestions.

Content blockers

19 These days, the size of many web pages has become bloated, and often you'll find them slow to load on your iOS device – even over a good Wi-Fi connection. Partly this is due to complex scripts often used by online advertising, which take



time to run. In iOS 9, Safari includes support for content blockers that can be configured to stop content from certain internet domains from loading. You can manage content blockers in Settings > Safari. You'll only see a Content Blockers item listed under the General heading if you've installed an app that adds one (even though the item shows up when you search for it at the top of Settings).

Easier on the eyes

20 Safari's Reader feature, which strips away superfluous content on long pages to give you a cleaner, reformatted view of only the actual content, has a bunch of new visual options. It presents text in the San Francisco font by default,

which is the system font on all three of Apple's latest operating systems. The same seven fonts available in iBooks are also available here, along with a choice of page background colours (white, cream, dark grey and black – the same selection is also available in iBooks). When using Reader, text size is adjustable.

Do things with a page

21 The bottom row of the Share sheet contains a couple of new things besides Safari's Request Desktop Site. Add to Favourites, which used to be relatively hidden away, is now found here, along with a more explicit Find on Page action as a convenience for anyone who is unaware of the existing, somewhat more hidden route of tapping the

Request Desktop Site

22 In iOS 8, the option to load the desktop version of a website

was tucked away where it was easy to miss. There are now two easy ways to reach it. The long-winded way is to tap the Share button and then Request Desktop Site in the bottom row of actions. However, it's quicker to hold a finger on the reload arrow in the address bar for a moment, then tap Request Desktop Site when it appears.



search field and then the last item in its suggestions to look for words.

Paste and Go

23 There's a hidden shortcut to paste and go to a web address that you've copied to the Clipboard. Hold a finger on the field and tap 'Paste and Go' in the options bar when it appears. With something else on the Clipboard, you'll get a Paste and Search option instead.

Upload files

24 Got a CV to upload as part of a job application? Wherever you see an option to upload a file to a site, you'll find iCloud Drive among the sources from which you can attach and submit a file to an online form.



Notes and Reminders

Important little details that you jot down are much smarter and richer

Persistent reminders

25 Due reminders on the Lock screen remain there unless you actively action them – if you unlock and then lock your iPad, your reminders will still be listed on the Lock screen.

More responses

26 When you action a notification, you have more options than before: you can mark something as completed, or you can choose the Later option, which gives you the choice of 'snoozing' a reminder.

Create reminders

27 While in an app, you can tell Siri to "Remind me about this" and it will create a reminder named after

whatever you're currently looking at in the app. You can also send things to Reminders from apps such as Safari by tapping the Share button, then Reminders. Here, you can add text and, by tapping the Options button, set a time or location to be reminded. In Safari's case, when you access that reminder, it will take you straight to the linked web page.

Enhanced notes

28 In the new, richer Notes app, you can embed pictures or web links into your notes. The easiest way to do this is often from Safari or the Photos app – tap the Share button, then choose Notes. You'll have the option of adding text to go with your link or photo, and choosing whether to create a new note or

add to an existing one. Pictures can also be added using the camera icon above the keyboard inside the Notes app (if this isn't visible, tap the + on the right to reveal it).

Make checklists

29 You can add checklists to notes, too – tap the icon of a circle with a tick inside, just above the keyboard. Type your first to-do, then press return to start a new one. Press the icon again to stop. To mark an item in the list as done, tap its circle.

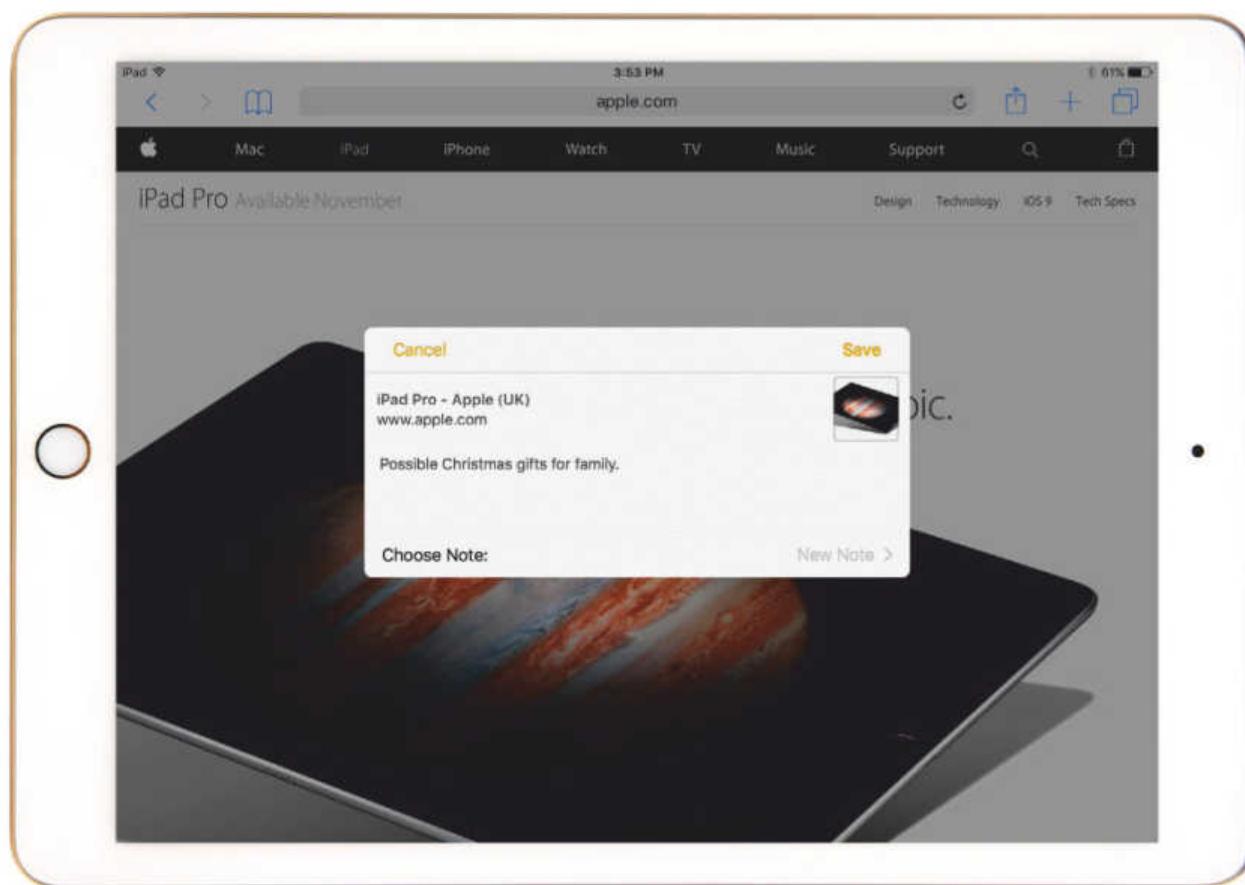
Sketch out ideas

30 Tap the squiggly line icon above the keyboard in Notes to add freehand drawings and use a ruler tool to draw straight lines.

You can choose different drawing implements and line colours. There are undo and redo options, and you can rotate the whole drawing for easier working. Tap Done to insert it.

Text styling

31 The Aa icon above the keyboard in the Notes app lets you style up text in notes as headings, subheadings and lists. Highlight text and choose a new style for it, or start a new line and choose a style before writing. Highlight text and then tap BIU in the pop-up options bar to change its weight and decoration. You can indent the current line or selection from the same pop-up.



Multitasking

Working with multiple apps just got a whole lot easier

Hand off tasks easily

32 Handoff is prominent at the bottom of iOS 9's App Switcher. Tap its bar to move a task open on one of your nearby Apple devices to your iPad.

Return to an app

33 When you switch apps through an action such as tapping a notification, you'll see a 'Back to...' button at the top-left corner of the screen.

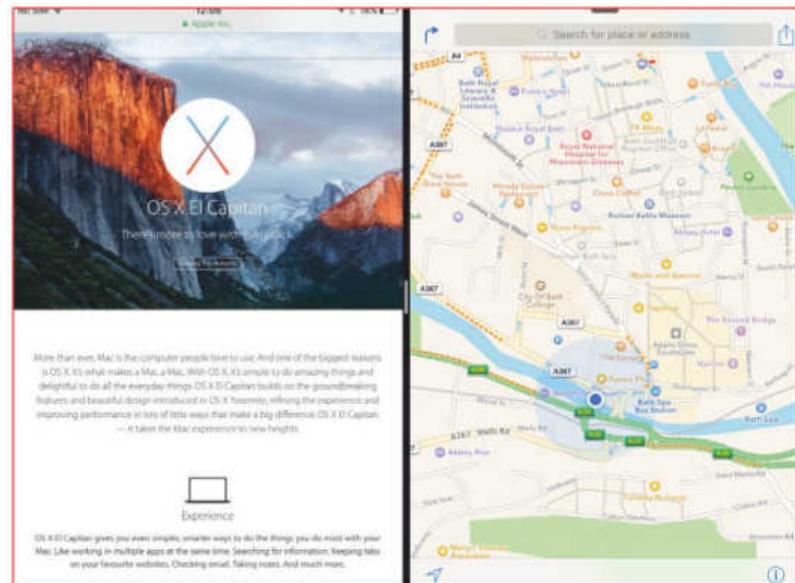
Dip into apps

34 Slide Over enables you to bring up a thin view of another app (which must support it) by sliding a finger

inwards from the right edge of the screen, so you can attend to things without stopping what you're doing. To choose which app is shown, swipe down from the line at the top of the right pane.

Work in two apps at once

35 Split View lets you run two apps side by side – but only on an iPad Air 2, iPad mini 4 or iPad Pro. To use it, start with the same gesture as Slide Over, let go, then drag the vertical line on the divider to the middle of the screen.



At last, you can work in two apps side by side, which is great for researching in Safari and taking notes alongside. However, this feature is only available on the iPad Air 2 and iPad mini 4.

Picture in Picture

36 On HTML5 video in Safari and in the Videos app, tap the button that shows two rectangles and an arrow. This turns the video into a small floating

box, which can be moved to any corner, resized using two fingers, and stays open even if you change apps. Flick it off the left or right of the screen to temporarily hide it (it will keep playing).

Notifications

Make sure you're kept informed about the things that matter most to you

Knock notifications into shape

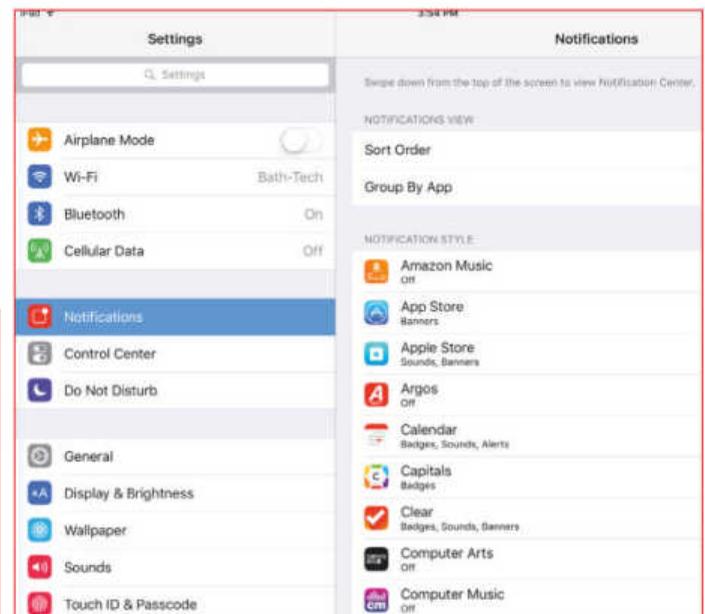
37 There are three different ways to sort items in Notification Centre. Go to Settings > Notifications and tap Sort Order. Select Manual and a list of apps appears lower down on the same page. Drag from the grab handles to the right of each one to set the order in which you want their notifications to be listed in Notification Centre. Notifications will then be grouped by app, and displayed in reverse chronological order within each group.

Pick Recent and return to the main page for Notifications and you'll see a Group by App switch just below Sort Order. When it is turned off, notifications are shown in strict reverse chronological

order. When on, a new notification from Messages, say, will move *all* of its unattended notifications to the top of the list. You might prefer the latter if *any* notification from a particular app is important, rather than rigidly attending to things by time received.

Monitor batteries

38 Among a slew of subtle changes to Notification Center, you can check battery statuses in the Today view. The Batteries widget shows power levels of your iPad and Bluetooth accessories, such as headphones. To enable this widget, scroll to the bottom of the Today view, tap the Edit button, then tap the + next to the widget's name. The Batteries widget is not shown in the Today



Notification Centre has several ways to sort items, and its Today view will even tell you how much power remains in your Bluetooth headphones.

view if a Bluetooth accessory is not paired and connected to your iPad.

Manage your usage

39 In Settings > Battery, you can get a breakdown of power usage. There are two options: Last 24 Hours and Last

7 Days (or fewer if you've had your iPad for less time than that). They display the proportion of battery life used by each app in that time. Tap the clock icon on the right to see the duration that each app was using power, both while on-screen and in the background.

Other apps

Beyond the big changes, there are plenty of subtle ones to discover

News and Newsstand

40

News is a brand-new app in iOS 9 that provides timely information in a single place, much like you might use an RSS newsreader to catch up with website updates. It provides publishers with a format that enables them to add animation and other engaging interactions to articles. Your iPad will need to be running iOS 9.1 or later to be able to use the News app in the UK.

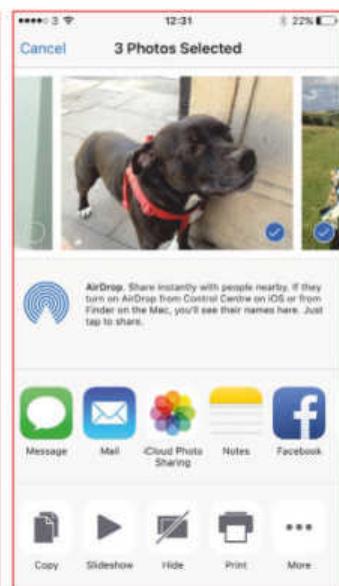
If you read digital editions of periodicals, those are still available in iOS 9; they simply no longer download into a special folder called Newsstand as they did in earlier versions of iOS. If you have upgraded your iPad from an earlier version and things in Newsstand, it will now be an ordinary folder, and you can move apps out of it.

Quick access to the Music app

41

When you connect headphones using Bluetooth (without music already playing), your iPad will display the Music app's icon at the bottom-left corner of the Lock screen. Swipe up from it to open the app. If your iPad is already unlocked, open the App Switcher (with a double-click of the Home button) and tap the row at the bottom of it.

Rather than tapping each photo you want to select, iOS 9 enables you to do it with one tap followed by a swipe across them.



To hide multiple photos, select them, call up the Share sheet, optionally select more photos in the strip across the top, and then tap Hide.

Photos

42

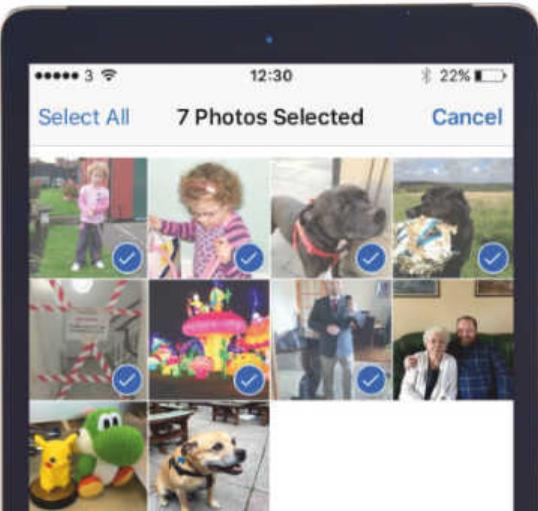
When viewing a photo full-screen, a strip across the bottom of the screen shows other images in the same album, collection or moment. Swipe across it to quickly browse through them.

In the Photos tab, tap Select then drag your finger from one photo to another to select them and those in between, rather than having to tap each one you want in the selection.

Instead of reaching for the back arrow at the top-left of a full-screen photo to return to its album, swipe downwards to dismiss the picture.

This is really handy on the iPad's large screen.

If you put screenshots on social media, as some of our friends do, you'll be pleased that iOS now puts any you take (by pressing the Home and sleep/wake buttons) in a Screenshots album, making them much easier to clear out later.

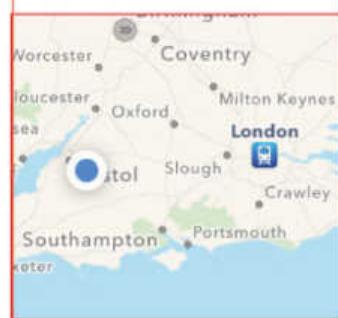


Maps

43

The latest step in Apple's attempts to improve its Maps app is the inclusion of public transport data to help you get from A to B, rather than just driving and walking directions. Previously, Apple made it so third-party transit app developers could plug into Maps, but now it's starting to add its own data to the app by default, including details of problems on your route, like it does for driving directions. However, transport data is available for a limited number of cities at present – you can keep track of cities covered at <http://bit.ly/AppleMapsTransit>.

Tap the Transport tab while plotting directions and the app will try to use Apple's own data before suggesting you look at transport apps in the App Store. Tap the 'i' at the bottom-right and switch to the Transport view. In all three views, a '3D' badge next to a city indicates you can take a Flyover tour of it. Zoom out in the Transport view and other badges will indicate where public transport data is available.



As you zoom out in maps, look for blue icons next to cities, which indicate public transport directions are available there.

There's a Selfies album too, but it isn't powered by intelligent face detection; any photo taken with the front-facing camera is added to it.

Rather than tapping and holding on a photo for an option to hide it, you must now tap Select, tap one or more photos, then tap the Share icon followed by the Hide action in the bottom row of the Share sheet. If you don't see that action, try swiping to the right – if you still can't locate it, tap 'More...' at the far right of the row and switch it on.



Podcasts

44

Apple's Podcasts app has been given a makeover to be more consistent with the Music app. Music's MiniPlayer – a bar above the tabs at the bottom when something is playing – is replicated, as is the use of an ellipsis (...) to indicate more options for an adjacent item.

The Unplayed tab is a quick way to catch up on missed episodes. Stations are similar, but you can limit them to specific shows. Create them by tapping the + in the My Podcasts tab.

The Top Charts page shows star ratings from listeners for each podcast and when their last episode was published. Tap at the top-left corner of the screen to browse charts or the Featured page by category.

The Home button

Master the iPad's Home button and quickly switch between apps

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9

The Home button (that's the one on the front of your iPad, below the screen) is what makes Apple's iOS devices so wonderfully simple to use. Whatever app you're using, a single press of the Home button will return you to your Home screen and your familiar app icons. If you opened the app from within a folder, that will still be open – a second press of the Home button will close the folder and take you back to the Home screen. If you have arranged your apps across multiple Home screens (indicated by dots at the bottom) and you're viewing the second or a later one, pressing the Home button will take you back to the first one. And if your iPad is asleep, a click of the Home button wakes it up.

That's not all the button does. Press and hold it for a couple of seconds to use Siri, your voice-controlled assistant (see page 96 for more). Also, after holding a finger on an app icon until they all jiggle, so you can organise them, pressing the button exits that mode.

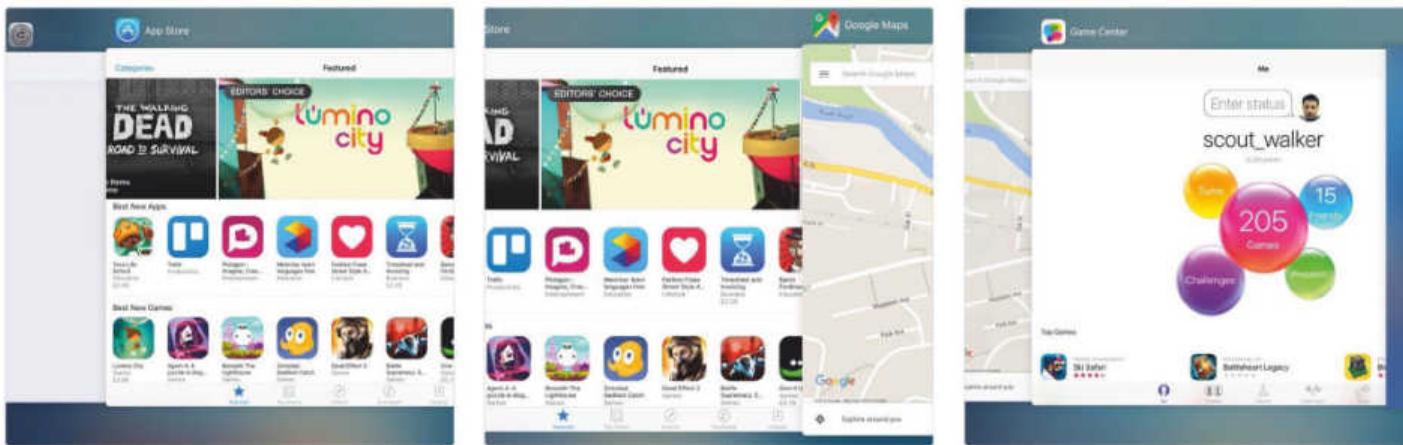
Even more usefully, you can press the Home button twice in quick succession to go to the App Switcher, which shows previews of the apps you've recently used. You can swipe through them and tap on an app's preview to return to it, without having to go back to the Home screen and hunt down its icon there. In iOS 8, the App Switcher also provides shortcuts to recent contacts. If you've never used it before, now is the time to try it out – you'll wonder how you ever managed without it!



Quitting apps

It's a common misconception that the apps shown in the app switcher are all currently running, and therefore slowing your iPad and draining its battery. In fact, what you see are simply your recently used apps, and they have no impact on your iPad's performance. In iOS, when you switch from one app and open another, there's no need to quit the first: if it needs to carry on working in the background – playing music, for example – then it just gets on with it; otherwise, it's seamlessly put on hold until you want to return to it.



HOW TO | MASTER MULTITASKING IN iOS 9**1 Double-click**

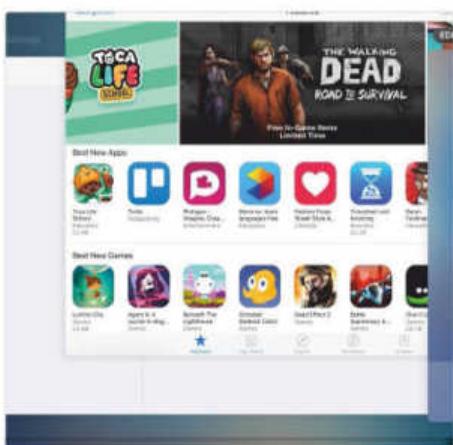
To get started with the app switcher, make sure your iPad is awake (that is to say, the screen is on and you're not being asked to enter your passcode – this won't work if it's locked). Now, whichever app you're in, double-click the Home button. You'll see the app you were using shrink down and move to the right slightly, overlapping a number of other app screens. The screen you can now see is known as the App Switcher.

2 Previous app

To the right of the screen, you'll see the previous app you were using, with a scaled down view of the contents of its last screen. Above and to the left of it, you'll see its app icon, the same as the one you see on your Home screen. You can tap on the icon or the app's screen preview to switch to this app. Flipping between apps in this way is generally quicker than going back to your Home screen and having to hunt down the previous app's icon.

3 More apps

Double-click the Home button to bring up the App Switcher once more. Have a look on the far right-hand side, and you'll see that another app is partially visible. Place your finger on this and drag towards the left. As you do, you'll see more thumbnails of apps coming into view, in the order in which you used them – the most recent ones first. Fast swipes across the screen will move through the apps more quickly. Tap any app to resume using it.

**4 Going back**

If you've opened the App Switcher by mistake, the easiest way to get back to the app you were using is to press the Home button once. Note that the four-finger pinch gesture, which normally brings up your iPad's Home screen, can also be used to get back from the App Switcher to the app you were using last. You can also open your iPad's voice-controlled personal assistant, Siri, when the App Switcher is open just by holding down the Home button.

5 Printing and Handoff

In the App Switcher, you'll always find your Home screen at the far left-hand end (though getting to it in this way is probably less efficient than simply pressing the Home button once when you're using any of your apps). One exception to this is if you're printing something: instead of your Home screen, the leftmost item will be Print Centre, which enables you to check how the print job is going or cancel it. The other exception is Handoff (see page 160 for details).

6 Troublesome apps

If one of your apps is being troublesome in some way or has got stuck, you can use the App Switcher to force it to close. Double-click the Home button, then swipe through the app screens until the troublesome app comes into view. Now simply flick the problematic app's thumbnail image upwards, towards the top of your iPad's screen, and let go – you'll see it (and its icon) disappear from view. Note that any unsaved work in that app may be lost.

Using gestures

Controlling your iPad with the power of touch

You might already be familiar with the iPhone or iPod touch, in which case you'll probably know some of the gestures that you can use to navigate your way around an iPad screen and perform various actions.

However, if you're new to the world of Apple's touchscreen devices, or you just want to make sure you aren't missing out, here's a quick gesture-by-gesture guide to getting the most from your iPad.

Note that the three 'multitasking gestures' (numbers 7 to 9 on the opposite page) are iPad-only and won't work on other iOS devices such as iPhones. They involve the use of four or five fingers, so they're purposely designed to be used on the iPad's larger screen.

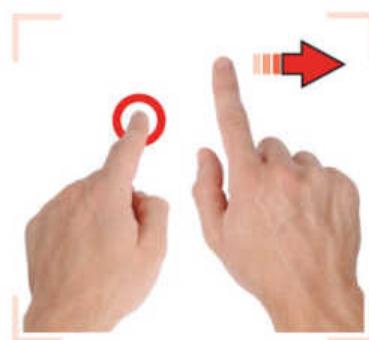
Also, if you don't want access to these three gestures, they can be turned off, but only as a group rather than individually. In the Settings app, go to General > Multitasking and turn off the adjacent switch.

Gestures in apps

Bear in mind that individual apps can implement their own gestures. In Keynote (Apple's presentation app), for example, you can nudge objects a single pixel at a time by tapping and holding an object, then swiping in the direction you want to nudge it with the other hand; you can also make items on a slide be the same size by dragging one object's resize handles, then tapping and holding on the object you want it to match.

As a rule, though, an app's custom gestures should never conflict with the standard gestures. (The exception

is if you enable VoiceOver, which bizarrely scrambles almost everything in the name of ease of use!)



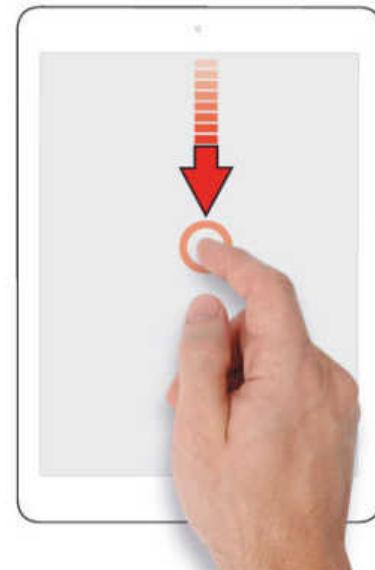
1 Single- and double-tap

Tapping the iPad screen is equivalent to clicking the mouse button on your Mac or PC, and performs the majority of functions. Tap on a button or icon to open an app, activate a web link, and so on. Tapping twice in quick succession is a double-tap. When viewing photos and web pages, you can double-tap to zoom in, then double-tap again to zoom out. For maps, double-tap to zoom in; tap once with two fingers to zoom out. Double-tap a column of text on a web page and it will fit the screen.



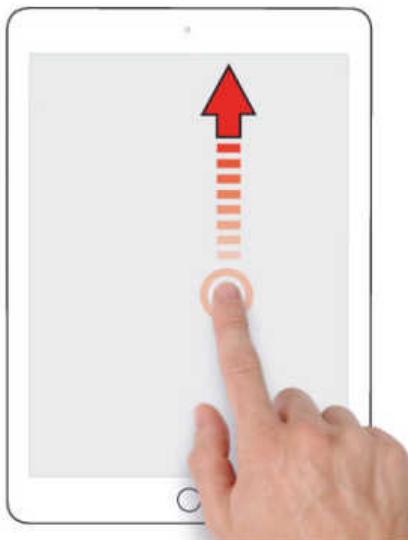
2 Tap and hold

Tapping on the screen and holding your finger in place often causes a small pop-over menu to appear, much like right-clicking on your Mac or PC. Most commonly this shows options for cutting and pasting text (when you lift your finger), but in Safari holding down your finger on a link offers options for dealing with it; in the case of a picture, you can save it to your Camera Roll. Tapping and holding an icon on the Home screen causes the icons to jiggle; you can then drag them to rearrange them.



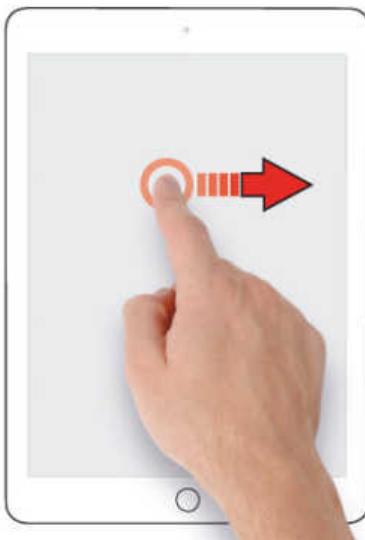
3 Scroll

Press your finger lightly against the iPad's touchscreen and then run it up and down the screen to move a list or page. When you find what you're looking for, release your finger and it'll stop scrolling. This is ideal for navigating through a web page or down a grocery list in the Notes app, for example. Some apps, such as the Music app, have an alphabetical scrollbar to the side which is ideal for speedily browsing a large library by dragging your finger over it to scroll.



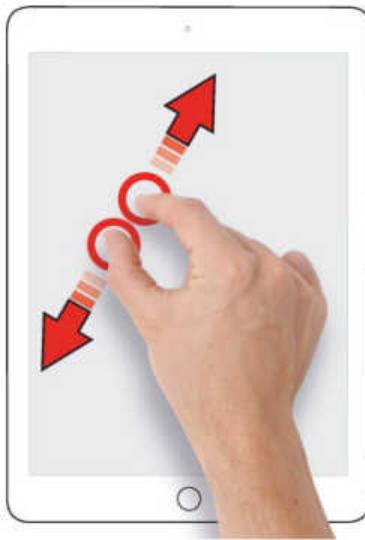
4 Flick

If you need to find your way through a long list (for example, friends and family in Contacts), you needn't spend ages scrolling manually – use the flick gesture to scroll quickly. Press your finger gently against the screen, then flick up or down, and your list will scroll through at a much faster speed than normal. The quicker you flick, the quicker you scroll. Simply wait for the scrolling to stop or gently press the screen when you find what you're looking for. This is handy for large libraries in the Music app.



5 Swipe

In apps where you can navigate from side to side, such as Photos or iBooks, you need to swipe. Using one finger, lightly run your finger across the screen from one side to the other and you can navigate from page to page. You can also use this to navigate around a website or map when you've zoomed in. Don't be afraid to explore, though: a swipe can do different things – in Mail, for example, a short horizontal swipe from right to left on a message in the list reveals options for dealing with it.



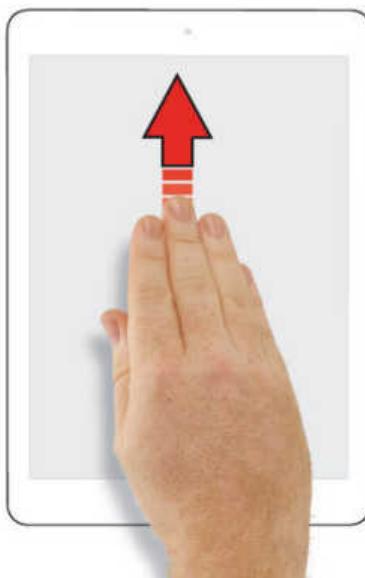
6 Pinch and unpinch

You can zoom into a web page on the iPad using the pinch and unpinch gestures. Holding your index finger and thumb close together like a crab claw, place them on the screen and slowly move them apart without lifting them. You'll zoom into (magnify) the page at the same rate at which you expand your fingers. To zoom back out, simply repeat the gesture but in reverse, bringing your fingers closer together. As with scrolling, the faster you move your fingers, the faster you zoom.



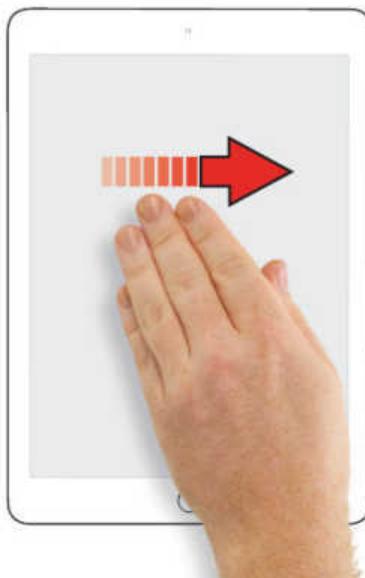
7 Home pinch

The speediest way to get back to the Home screen on your iPad is the four- or five-finger pinch gesture, which can be executed in any app to close it. Simply place four or five fingers on the screen and bring them together to return to the Home screen. (This is the same gesture used to activate Launchpad in OS X El Capitan.) Note that this gesture is an iPad-only gesture – it does not work on an iPhone or iPod touch – and if it doesn't work, check that it hasn't been turned off (in Settings > General).



8 Multitask swipe

You can also use four or five fingers to bring up the App Switcher by swiping them upwards on the screen. (Again, this mimics the swipe upwards that activates Mission Control in OS X El Capitan on the Mac.) You can then tap the thumbnail preview or icon of an app to switch to that app. To hide the switcher again and return to the app you were using last, swipe downward with four or five fingers. Remember, this is another gesture that works only on the iPad, so don't try it on an iPhone!



9 App switch swipe

As well as using the App Switcher to jump between apps, you can simply swipe sideways with four or five fingers to move from one app to another. Swipe from the right to the left to step through your apps in the same order as they appear in the switcher, or left to right to reverse. As you swipe across the screen, the current app disappears to make way for the next one. This is helpful for moving between your most recently used apps to reference or copy and paste something. Again, it's iPad-only.

Keep things secure

Protect your data and prevent others using your iPad

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9

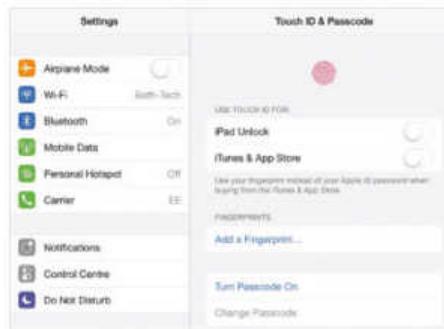


While it's great having fast and easy access to all your contacts and other personal information wherever you are, the flip side is that it could be a disaster if you lose your iPad.

The simplest precaution you can take to protect your data is to set a passcode, so that the iPad requires you to enter a six-digit code each time you wake it up. If that sounds like a bit too much hassle, you can change the Require Password setting so that if you unlock your iPad within a specified time of locking it – 15 minutes, say – then you don't have

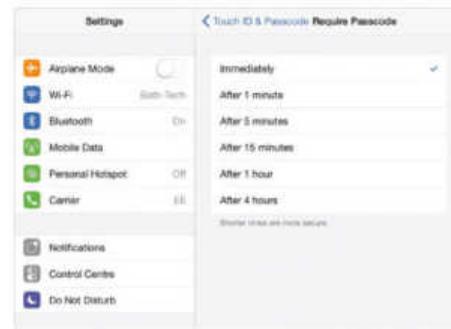
to re-enter the code, but this is obviously less secure. On the other hand, if you feel that iOS 9's default six-digit code doesn't sound secure enough, you can opt instead for a harder-to-crack case-sensitive password, which can also include numbers and symbols. There's even a nuclear option: go to Settings > Touch ID & Passcode (or just Passcode) and switch on Erase Data. Now, if the passcode is entered incorrectly 10 times, all your data and media will be erased and the iPad will be reset to its factory settings. Find out more about resetting and restoring your iPad on page 166.

HOW TO | SECURE YOUR iPAD



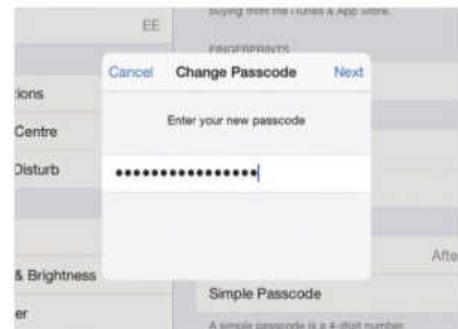
1 Set passcode

Go to Settings > Touch ID & Passcode and tap Turn Passcode On. Enter a passcode – but make sure it's something you'll remember: if you enter it incorrectly more than 10 times, you'll be locked out and your only option will be to wipe and restore your iPad – see page 166.



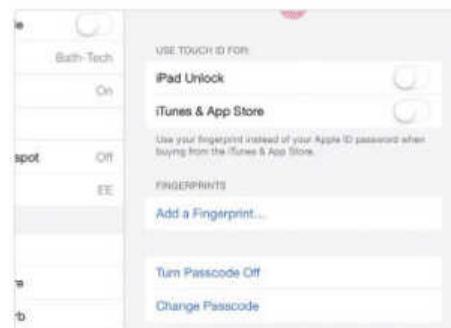
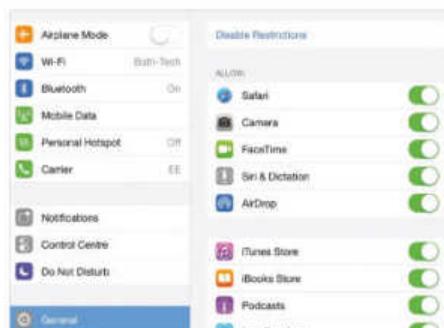
2 Hold fire

Optionally – if, for example, you unlock your iPad to respond to several emails or tweets in a short space of time – you can tap Require Password and select a delay period before your passcode is required again to unlock your iPad. Note that longer periods mean less security.



3 More secure

The default six-digit passcode in iOS 9 is stronger than iOS 8's old four-digit one, but if someone observes you entering some of it, they may quickly work out the rest. You can set a complex password containing letters, numbers and symbols by switching off Simple Passcode.



4 Restrictions

Every aspect of iPad use can be further protected in Settings > General > Restrictions, from changing accounts and privacy-related settings to deleting apps. To begin, tap Enable Restrictions and set a different passcode to the one that unlocks your iPad. Don't forget it.



5 Secure Siri

Even if you set a passcode, Siri defaults to being accessible without entering the code, and it can be used to get at contact information, for example. To prevent this, go to Settings > Touch ID & Passcode and turn off the Siri switch so that it can only be used when your iPad is unlocked.

6 Remote wipe

As a backup, install Find My iPhone (see page 163). Then, if you lose the iPad, you can use any computer to sign in at icloud.com. Click Find My iPhone, then All Devices at the top and choose your iPad. Now you can lock it remotely or, if you've given up on finding it, even wipe it.

Using Touch ID

Fingerprint security made easy on newer iPads

SKILL LEVEL

Anyone can do it

IT WILL TAKE

15 minutes

YOU'LL NEED

iPad Pro, iPad Air 2 or iPad mini 4, iOS 9

W

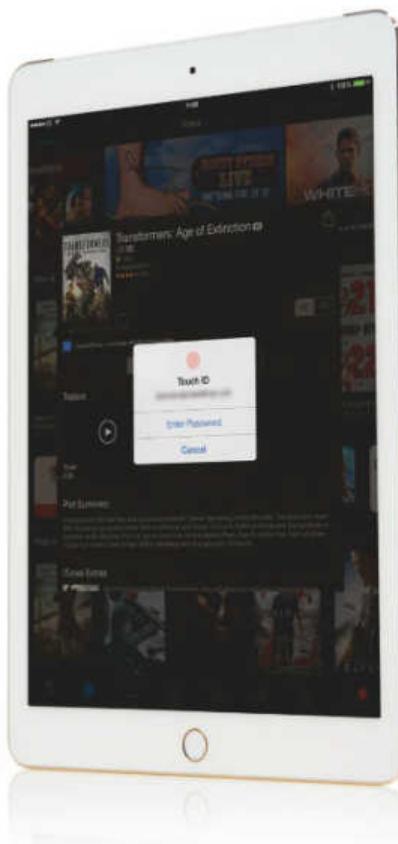
hile it's always a good idea to set up a security passcode for your iPad, the iPad Pro, iPad Air 2 and iPad mini 4 offer a more secure and easier-to-use option: fingerprint recognition. The Home button in these iPads incorporates a state-of-the-art fingerprint scanner (which debuted on the iPhone 5s), and once you train it to recognise your fingerprint, unlocking your iPad or authorising App Store purchases is just a matter of laying your finger on the Home button for a second or so. If someone else tries this, their fingerprint will not be recognised.

Getting in touch

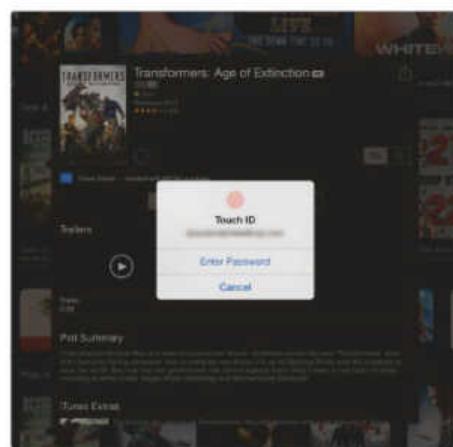
Before you begin with Touch ID you'll need to ensure you've set up a passcode for your iPad. This is because if Touch ID input fails for any reason

(because you're not recognised – or it's not you!) or if you restart the iPad, the device will fall back to asking for your passcode. A passcode is also important if you want your family, friends or whoever else you trust to use your iPad to unlock it using a fingerprint. Up to five fingerprints can be registered, and each person will need the passcode as a fallback option.

For anyone worried about privacy, Apple is at pains to point out that fingerprint data stored on the iPad isn't going anywhere. In fact, the device doesn't store an image of the fingerprint at all; rather, it creates a unique mathematical representation of it which can't be 'reverse engineered' back into an image. This data is encrypted and stored on the device, and only Touch ID itself can access it – it's never transmitted or backed up.



HOW TO | SET UP TOUCH ID



1 Getting started

With a passcode set up, go to Settings > Touch ID & Passcode > Add a Fingerprint... When prompted, touch (don't press) the Home button, using the same thumb (or finger) that you normally use when waking the iPad, and watch as the display builds up an image. When you are prompted on-screen, lift your thumb/finger and then touch it down on the Home button again, shifting its position very slightly.

2 Recording your print

Repeat this process until the graphic on the display is completely filled with red – the scanner is gradually reading more information. The final step is to capture the edges of your print, because it's unlikely you'll always press the Home button dead centre. So, as the display suggests, hold the iPad how you usually would when pressing the button and touch the outer areas of your digit, again shifting it slightly.

3 Making purchases

Once Touch ID is set up, you can also use it to buy from the iTunes Store, the App Store and the iBooks Store. Make sure that iTunes & App Store is enabled in Settings > Touch ID & Passcode. Now, each time you purchase an item, you'll be prompted for your fingerprint rather than your Apple ID's password. If it's not recognised five times in a row for any reason, you'll have to enter your password instead.

Using Notification Centre

Stay on top of events using your iPad's built-in notification system

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9



here's a lot going on behind the scenes on your iPad while you use it – emails, tweets and other messages arrive, events on your calendar draw near, tasks for which you've set reminders become pressing, and much more. You won't necessarily want to know about everything that happens – for example, you might only care to read about friends' updates on a social network when you open the relevant app. Notification Centre gives you a consolidated 'noticeboard' where you can find out only what you want to know about at a glance.

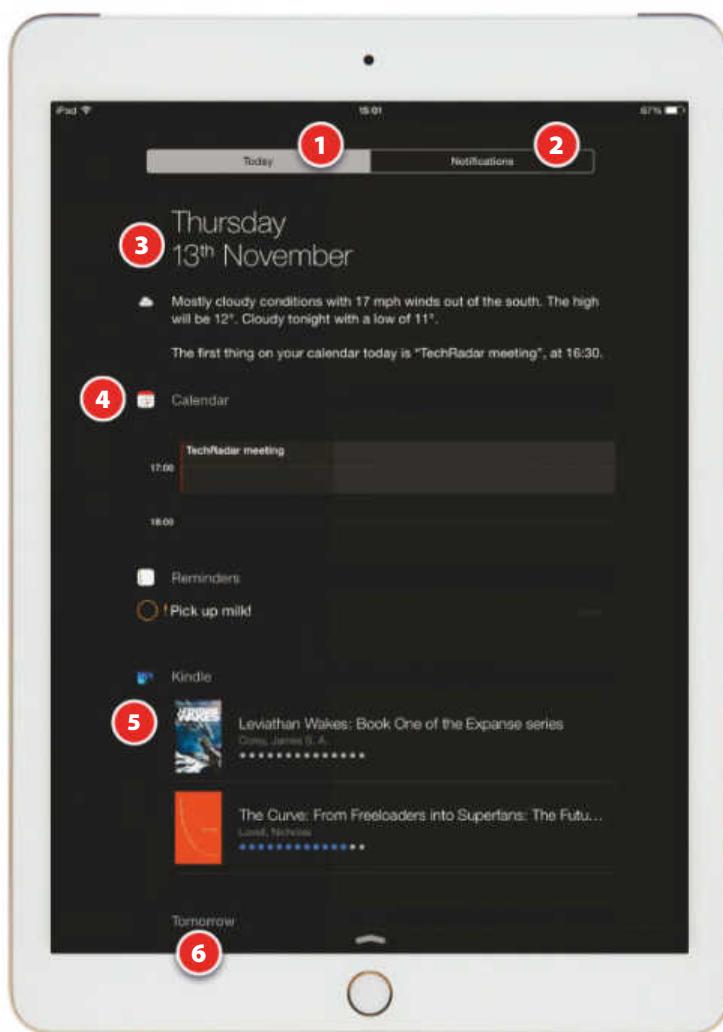
You decide which apps' notifications are shown in it, and what type of notification each app will give you: a banner, which pops up briefly at the top of the screen but then quietly

fades away after a few seconds; or an alert, which pops up in the middle of the screen and requires you to acknowledge it.

To view notifications, simply swipe downwards from the top of the screen to open Notification Centre. It has two tabs: the Today view (see below) and the Notifications view. Tap an item to jump straight to it in the corresponding app. Note that with some items, such as emails, doing this will mark them as read and remove them from Notification Centre. Others, such as pending Reminders or upcoming Calendar events, will remain until they've been acted upon or the date has passed.

Notifications can also appear on the Lock screen. There, rather than tapping, slide a finger rightwards on an item to unlock your iPad and then jump straight to the relevant app.

VISUAL GUIDE | NOTIFICATION CENTRE



Find your way around the Notification Centre panel

Today tab

1 Drag your finger down from the very top of the screen to reveal Notification Centre. The default view is Today, which begins with a summary of the weather, then your next event, followed by the day's schedule, reminders, and tomorrow's events.

Calendar events and Reminders

4 All your Calendar events for today appear here. Tapping on one opens the calendar at that event. Below, you'll see reminders that are marked as due today. You can tap the circles next to a reminder here to mark it as done.

Notifications

2 Swipe leftwards or tap the Notifications tab to see all your notifications. These will appear in the order you've specified in Settings (see opposite page), then in chronological order within each individual app.

Widgets

5 Information from other apps can be added to the Today view via special 'widgets' that are included with them. Here, for example, you can see links to Kindle books that have been recently opened in Amazon's Kindle app.

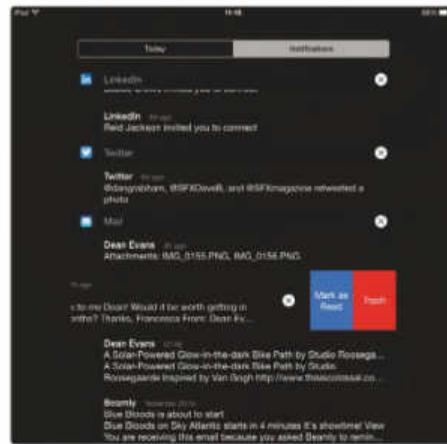
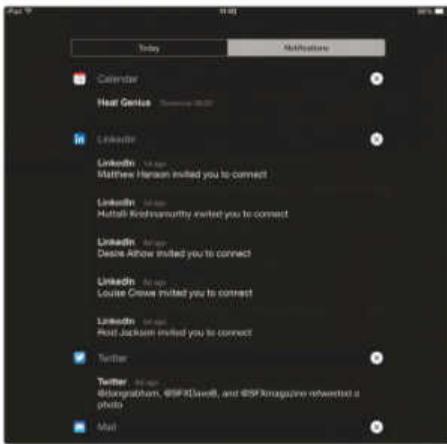
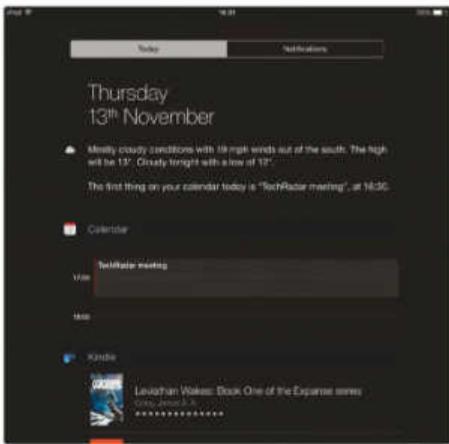
Today Summary

3 The Today Summary includes relevant information for the day ahead. By default, it will usually tell you the day and date, the local weather, followed by details from your calendar and reminders. Tap a notification and you'll jump straight to it in the corresponding app.

Tomorrow Summary

6 Scroll down further and you'll see a heads-up of how many events and reminders are coming up the next day (not shown here). To close Notification Centre again, flick upwards on the grab handle at the very bottom of it (the grey, upward-pointing arrow).

HOW TO | USE THE NOTIFICATION CENTRE



1 Slide down

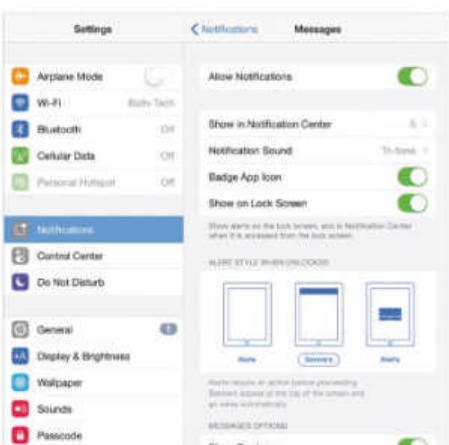
Slide your finger down from the top of the screen to open Notification Centre. It's best to get into the habit of starting on the iPad's bezel (outside the display), otherwise you might end up opening the search bar instead. A dark overlay will appear, displaying a weather report and summary of the day, plus any calendar events and reminders that are due today. Any app you were using or task in progress will be paused (although audio apps will continue).

2 View Notifications

Tap Notifications to view all those you've had recently from all the apps you've authorised to appear here. Many apps are capable of giving you notifications, so this panel is often packed. It's good to check the icon of the App Store for a count of apps that can be updated, or here in Notification Centre how many have been updated (if auto-update is turned on). To remove all of an app's notifications, tap the X button to the right of its name, then Clear.

3 Interactive notifications

Many notifications provide the ability to deal with things in Notification Centre, rather than having to go to their app. Swipe leftwards on a notification from Messages, for example, and you'll be able to reply right there and then. Swipe an email message to the left and you can mark it as read or trash it. Not all notifications support interactivity beyond the ability to dismiss them from the list. Do that by swiping left on an individual item and tapping X.



4 Notification settings

In Settings > Notifications, tap on an app to adjust its individual notification settings. Here you can allow or disallow notifications, control how many the app can show in Notification Centre, and whether future notifications are accompanied by a sound (sometimes customisable), show as a numbered badge on the app's icon, or appear on the Lock screen. You can also alter the alert style here (none, banners, or in-your-face alerts). Changes are instant.

5 Edit the Today View

Open Notification Centre and tap the Today tab. Customise the order in which items are shown here by scrolling down and tapping the grey Edit button. You'll see a list of apps that are already shown in the Today view and, below that, apps whose widgets you aren't using. Reorder items by dragging on the grab handles to the right of most of them, hide widgets by tapping the red - symbol and add them to Notification Centre by tapping the green +.

6 Remove or sort items

To hide an app from the Notifications view, go to Settings > Notifications, tap the app's name then Show in Notification Centre and pick 'No Recent Items'. You can sort items in the view manually or by time. The former lists notifications by app in the order they are listed Include below; tap Edit (at the top-right) and then drag on the handles next to each app to change their order. Sorting by time bumps apps that have notified you most recently to the top of the list.

Your iPad's Lock screen

Even when your iPad is locked, you can access handy features



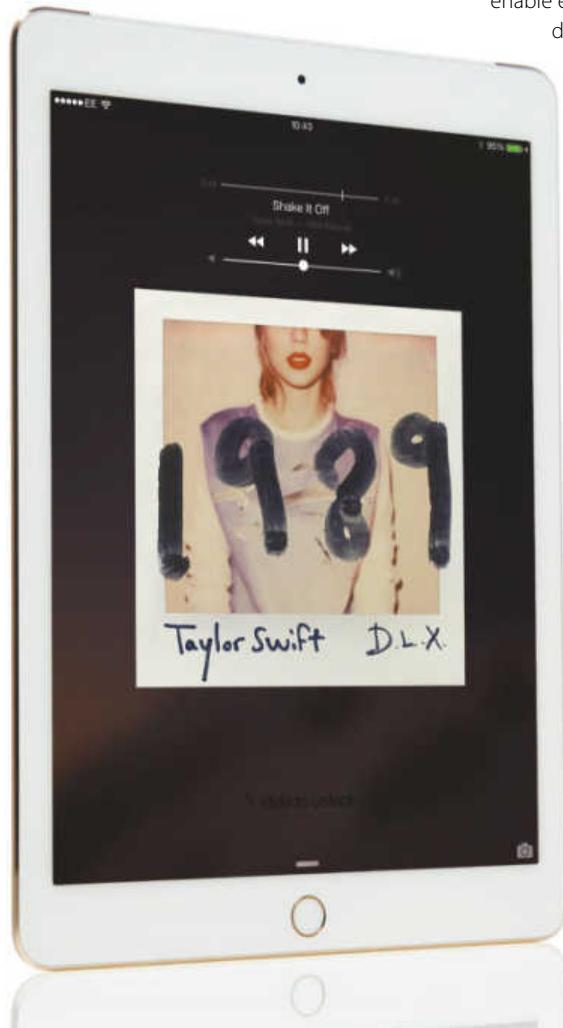
our iPad's Lock screen does more than simply provide a security block to prevent people gaining unauthorised access to your device.

It also provides direct access to key features.

You can unlock your iPad straight to the camera, for those times when you're right on the spot and the moment won't wait. You'll see notifications such as new messages, reminders and other things appear on-screen, and you can swipe from right to left across one to deal with it in place, or swipe the other way, and then enter your passcode if you've set one up, to go directly to the relevant app and respond from there. You can also take control of your music here, without having to unlock your iPad.

See your notifications

We'll look at how to set up reminders and notifications later. But it's useful to know that



you can configure certain apps to alert you on the Lock screen: tap Settings > Notifications, scroll down and select an app, turn on 'Show on Lock Screen', then choose the type of alert (persistent pop-ups or discreet banners at the top of the screen). The app will now briefly wake up your iPad at the Lock screen to notify you. If you ignore the alert, your iPad will quickly go back to sleep; to respond to the alert immediately, just place your finger on the app icon and swipe left to right, then enter your passcode if necessary.

Under Settings > Touch ID & Passcode, you can set whether it's possible to access Notification Centre, Today view (a summary of the day, your Calendar day view, your next destination, and so on) or both from the Lock screen. If you enable either of these options, you can pull

down from the little tab at the very top of the Lock screen to view notifications and other items you opt for.

Swipe for controls

Tap Settings > Control Centre and you can set whether it's possible to access Control Centre (see page 41) by pulling up the little tab at the very bottom of the Lock screen.

Control music

If you have a song playing in the Music app, the Lock screen doesn't display the wallpaper you've chosen using the Settings > Wallpaper facility. Instead, it displays details of what the Music app is playing (or some other audio apps like BBC iPlayer Radio). This shows you the name and artwork of the currently playing track, play/pause, next/previous and volume controls, plus a handy progress bar that shows the track's duration and how far through it you are – this enables you to scrub through by dragging the playhead to the left or right. These

Normally your Lock screen simply displays the image you've chosen using Settings > Wallpapers, but it also enables you to control your music (left) and even quickly access the iPad's camera (above right).



controls also appear in the Control Centre, if you have it enabled, but without the artwork.

Take a photo

In the bottom-right corner of the Lock screen, you'll see a little camera icon. Swipe this upwards and you'll go straight to the Camera app, so you can be snapping away within seconds. Once you've shot any stills or videos, you'll also be able to tap the usual thumbnail in the corner of the screen to review them and even edit them, but you won't be able to share them or view anything else in your Camera Roll without entering your passcode, if you've set one up.

Handoff

Sometimes you'll see an app icon in the bottom-left corner of the Lock screen. This happens when your Mac or iPhone is nearby and the foreground app on it is one that also exists on your iPad. It signifies that you can swipe upwards on that icon to transfer the task – including whatever document, email or web page you are viewing – to the equivalent app on your iPad. Apple calls this Handoff, and it's a convenient way to switch from one device to another – whichever is most suitable at a given moment. It works in the other direction, too; if you're working on a spreadsheet or a presentation on your iPad, you can move it to your Mac if you think that will help you to get the job done more quickly or just more easily. See page 160 to find out more about using Handoff.

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Do Not Disturb

Ensure your iPad can only disturb you for vital messages

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

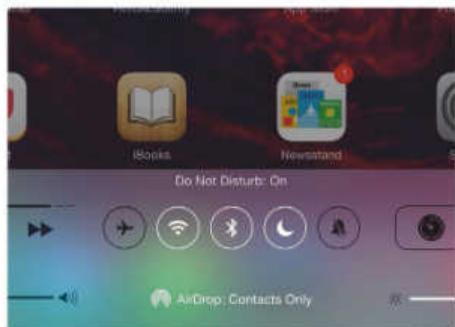
iPad, iOS 9



andy though it is to be notified of things, if you're busy you won't want to be interrupted by every new email or tweet. The solution is Do Not Disturb. If you turn this on in Control Centre or Settings, all notifications are silenced when your iPad is locked, although alarms from the Clock app (see page 88) will still sound. Optionally, you can set Do Not Disturb to kick in at a preset time, then deactivate itself again at another preset time. You can also allow incoming FaceTime calls from specified groups of people (which you must set up on a

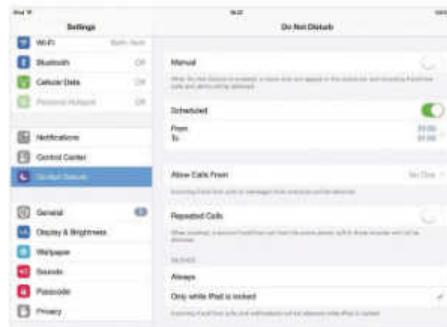
computer or at icloud.com), or allow a call from someone who tries repeatedly within a short time – useful in an emergency. This is of broader use on an iPhone, of course, but it works with FaceTime calls on your iPad, too. The guide below explains the options that are available for Do Not Disturb – it's all pretty intuitive, and you'll soon have it set up. One thing that is lacking is the ability to set more than one quiet period (say, overnight and again during the day). However you can easily turn Do Not Disturb on and off in Control Centre – handy if you happen to be in a meeting, for example.

HOW TO | SET UP DO NOT DISTURB



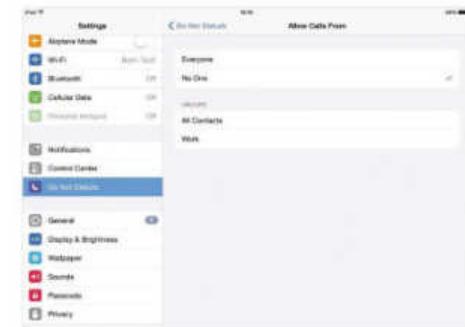
1 Turn it on

To activate Do Not Disturb, swipe upward to open Control Centre and tap the crescent moon icon. That symbol appears in your device's status bar to remind you the feature is active. Now notifications are silenced and the screen will be kept dark, unless you turn off the feature.



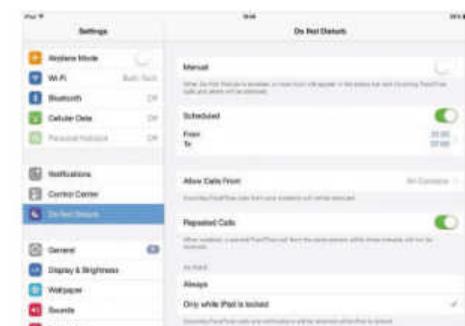
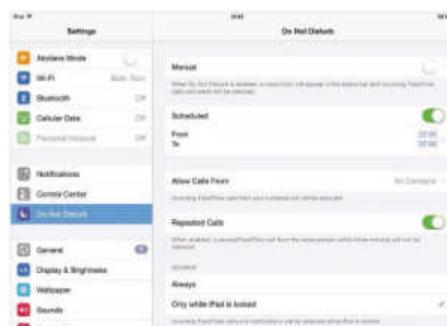
2 Customise it

All incoming messages and notifications will be suppressed. But what if something really urgent crops up, or you want to allow specific people to reach you? Go to Settings > Do Not Disturb to customise the feature and configure any exceptions you want to allow.



3 Who can call?

Even with Do Not Disturb active, you can set your iPad to accept messages from specified people. To do this, tap Allow Calls From and then choose either Everyone or No One. You can also select specific groups which are allowed to get through – perhaps work or family.



4 Create a group

To create a new group, you need to go to icloud.com on a computer, sign in and click Contacts. Click on the '+' at the bottom and choose New Group. Give it a name, then click All Contacts and drag names from the list on the right onto the group's name on the left.

5 Urgent calls

What if somebody is trying to get hold of you urgently, but it's not someone you've added to a group? In Settings > Do Not Disturb you can simply switch on the Repeated Calls option; if the same person tries again within three minutes, the call will be allowed through.

6 Schedule that

Instead of turning on Do Not Disturb manually, schedule it to activate automatically. Turn on the Scheduled option, then tap the From/To row and set the times between which you don't want to be disturbed. Now you're able to enjoy an uninterrupted period in your day.

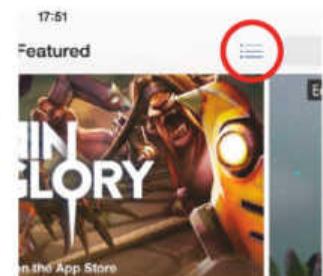
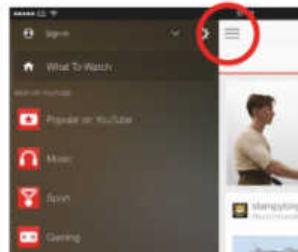
Find your way around iOS

Get to know the standard icons used everywhere on your iPad



The iPad is renowned for its ease of use, and a key factor in this is consistency of design. The iPad's operating system and your apps all use familiar icons and buttons for standard functions, so once you've got to grips with these, you've mastered just about all you need to know. Where you do need to navigate through more complex menus, there are intuitive back and forward (or up and down) arrows. The one thing that often isn't obvious is where you can scroll down for more content – scroll bars usually don't appear until you actually try scrolling. Here's a guide to the key symbols.

Tap the three-dot 'More' button to see an app's further options. Here in Dropbox there are some non-standard symbols, but all have text labels to help you out.



The three-line 'Menu' icon is a common icon but it isn't used consistently, and it can therefore be a little confusing. For example, in iBooks (above left) it takes you to a book's table of contents; in the Music app it opens the list of tracks that are queued for playback; and in the App Store (above) it opens your Wish List. However, in the YouTube app (left) it opens a sidebar of additional options.

Standard iOS symbols and buttons

Edit **Fundamental commands** are usually in words, including Done, Save, Undo, Redo, Edit and Cancel.

+ **Add** a new item or create a new document – or, in the Safari web browser, open a new tab.

Compose or create a new item or document, such as an email.

Camera Insert a **picture**, either by using the camera to take a new one or by opening your Camera Roll.

Organise or move the selected item. Used in Mail, for example, to file emails into folders.

Share the selected item. Tap this for a range of sharing options, usually including Mail, Messages, Twitter, AirDrop and Print, among others.

Download an item, or sometimes view the items you've previously downloaded in the relevant app.

Bookmarks In lots of apps, including the Safari web browser, you can access your saved **bookmarks** by tapping this.

i In some apps, this icon gives you access to **Info** or sometimes app or document settings.

Gear Some apps tuck **Preferences** and options behind this icon, possibly instead of using the Settings app.

Refresh your view. Some apps, such as eBay and Twitter, use a 'pull down to refresh' gesture instead.

Reply Usually **Reply** – although in Mail and other apps you'll also get options to Forward and Print.

X **Close**, **Delete**, or sometimes **Stop** or **Cancel** – for example, stop a web page loading in Safari.

Bin **Delete** an item. Often you can also swipe right-to-left across an item to reveal a Delete button.

Magnifying glass The universal symbol for **Find**, of course. Tap this icon or the text box adjacent to it to initiate a search.

User Tapping this icon typically takes you to a page where you can change **account settings**.

Location Services In the device's status bar, this shows that **Location Services** is active. In Maps and other apps, tap it to find or display your current location.

Play The symbol for **Play** predates even the VCR. You'll also see the standard symbols for rewind, fast forward, pause and so on.

AirPlay If an app supports **AirPlay** and a suitable speaker or TV is in range, tap this to route the app's audio or video output to it. See page 138.

Star Tap this (or else a flag icon) to mark as a **Favourite**, or to view favourites or top-rated or featured items.

Recent Items View **Recent Items**, your browsing history in Safari, or similar.

More Options **More Options**. The panel that opens to display these should have a Cancel button; if not, tap outside the panel to close it.

More Options Some apps use an icon like this to show **More Options**, but it might take you to a Contents list, Most Viewed items, or something else!



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Using Control Centre

Take control of your iPad's key functions from anywhere

Control Centre (or 'Center' if you have US English as your set language) provides you with a simple and quick way to access a lot of useful controls on your iPad. You access Control Centre by sliding your finger up from the bottom of the screen. It's usually best to start with your finger on the bezel and slide upwards. It will slide into view as a greyish transparent panel containing a range of buttons and sliders.

Control Centre can seem a bit daunting at first; it's certainly a lot more detailed and varied than many other parts of iOS. But once you are accustomed to its layout, you'll find it very useful.

On the left-hand side, you'll find buttons and sliders for media playback (music and video). The top slider is the playhead, which is used to control the position within a music track or video; below that are the usual Play, Next and Previous buttons along with whatever song, audiobook or video is currently

playing; below this sits a volume slider.

In the middle are six buttons that turn on and off key features: Airplane Mode, Wi-Fi, Bluetooth, Do Not Disturb, Mute, and Orientation Lock.

At the bottom are AirDrop and AirPlay buttons, both used to share items on your iPad with other devices. AirPlay will only be visible if a suitable speaker or Apple TV is found nearby. On the right is a slider to control the screen brightness. Finally, in the bottom-right corner are shortcuts to the Timer feature of the Clock app, and the Camera app.

When you're finished with Control Centre, swipe back down the screen (or tap outside it) to dismiss it. Control Centre might seem cluttered, yet you'll soon remember its layout and save time over switching to the Settings app.

From the Lock screen

Control Centre can be accessed from the Lock screen without entering your passcode first. This enables you to do things like skip music tracks, adjust screen brightness and access the camera. However, some features are blocked; you can't access old photos through the Camera app this way, for example.

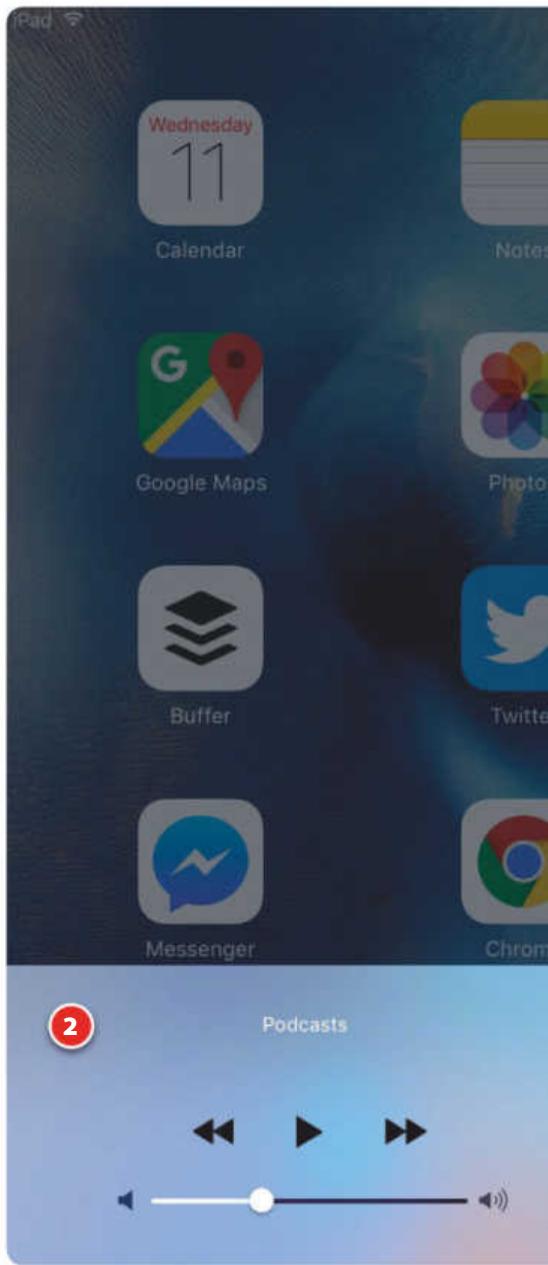


1 Opening and closing

To access Control Centre, slide your finger up from the bottom edge of the screen. You can access Control Centre from just about any part of iOS, including inside apps. Sometimes all you'll see when you do this is a grey tab with an arrow pointing upwards; a second swipe upwards then reveals Control Centre. Swipe downwards, or tap outside Control Centre, to hide it and return to whatever you were doing previously.

2 Music and video

Control Centre is in its element when it comes to controlling media. You use the controls just like you would inside the Music app, to skip to the next or previous track, and to scrub through audio by dragging the playhead. The volume control and brightness sliders on the right are useful for media playback. When the Music app is playing something, track details will appear underneath the playback controls. Tap this text to switch to the Music app.

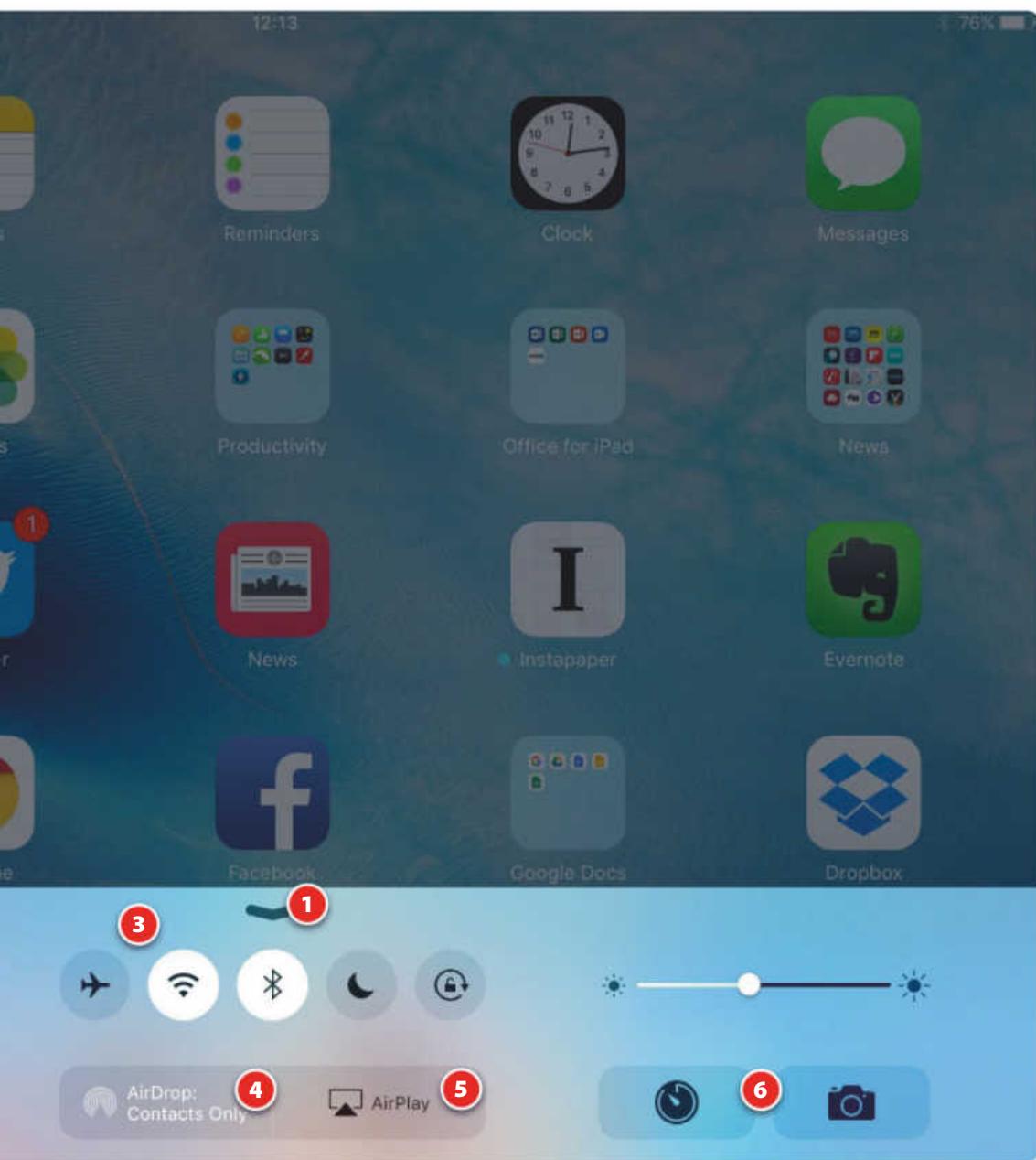


3 Quick features

In the middle are six buttons used to turn features on and off: Airplane Mode, Wi-Fi, Bluetooth, Do Not Disturb, Mute and Orientation Lock (to lock the screen in its current orientation: portrait or landscape). To turn a feature on, tap it and it lights up. We normally leave Wi-Fi on, and turn on Bluetooth to use a keyboard, AirDrop or Handoff. However, the status of these and other features can be toggled on an ad hoc basis.

6 Quick app access

To the right are icons that take you straight to two useful apps: Clock and Camera. Tapping the left one of these icons opens takes you to the Clock app's Timer feature, enabling you to quickly set a countdown. Use the barrel picker to set a time, and tap Start. Tapping the right icon opens the Camera app so you can take a photo without having to return to the Home screen and track down the app's icon among all the others there.



4 Turning AirDrop on

AirDrop is a fantastic technology for sharing files between iOS devices and Macs running OS X El Capitan. To turn it on, tap the AirDrop button in Control Centre. You can choose to share files with Everyone or Contacts Only (which limits it to people in your Contacts app). AirDrop uses both Wi-Fi and Bluetooth, so turning on AirDrop automatically switches on those features, and their buttons will light up.

5 Using AirPlay to stream video

The AirPlay button is used to stream video to an Apple TV, and audio to an AirPlay-compatible speaker – it will only appear if your iPad can find at least one of these things nearby. With some media already playing, open Control Centre and tap the AirPlay button. Choose the device to which you want to stream the media. You can also choose to turn on Mirroring when sending to an Apple TV, which will display whatever is on your iPad's screen on the television as well.

AirDrop with apps

AirDrop makes it easy to share things – documents, contact details, links to web pages and more. After switching it on in Control Centre, things can be shared from many apps. AirDrop uses Bluetooth to discover nearby Mac and iOS devices, and Wi-Fi to make a direct transfer to the other device.

To share a photo, say, open Control Centre, then tap AirDrop and choose Contacts Only (if you know them) or Everyone (if you don't). In the Photos app, pick a picture, then tap the Share button (bottom-left). The top row of the share sheet that opens shows people nearby who have AirDrop turned on. Tap one to send the photo to them.



Master the iPad's settings

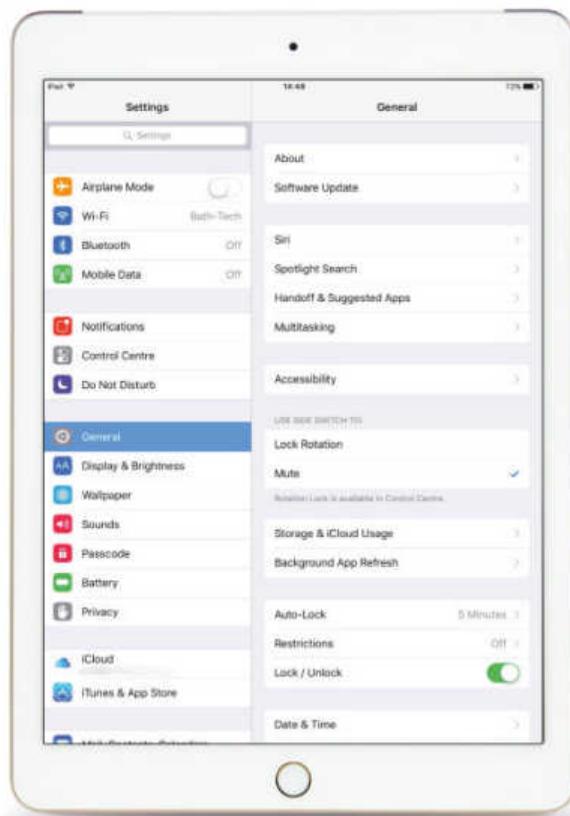
Configure your apps and customise your iPad



Apple has been criticised for being too controlling over everything to do with iOS, and the critics do have a point:

Apple keeps a firm grip on what apps are made available and, if you're used to the way things are done in the world of Android devices, you may well miss the variety of widgets you can choose to install and the freedom to customise your iPad's Home screen layout.

If you're switching from Windows Phone, you might miss the option to move and resize your Live Tiles; by comparison, the iPad's Notification Centre is pretty inflexible. However, there is a respectable range of things you can do to customise your iPad. For a start, you can change how it looks by choosing new wallpaper for the Home and Lock screens. The two can be set independently of each other, too. You can change the sounds that play for a variety of events, such as incoming email and alerts for reminders and calendar events. You can even assign a unique ringtone to each contact, so you know at once who's trying to reach you using FaceTime – see page 71 for details.



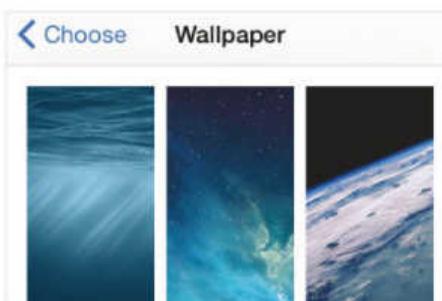
You can create multiple Home screens and rearrange the icons on any of them: just tap and hold on any icon until they all start 'jiggling', then drag them to a new position. Drag one to the edge of the screen to flip to the next Home screen, then tap the Home button when you're finished. Dragging one app onto another creates a folder, and you can add website shortcuts to the Home screen.

Personalise your iPad

Most importantly, you can use the Settings app to configure your iPad just the way you want it – right down to fine details, such as what happens when you tap the left-hand margin in iBooks.

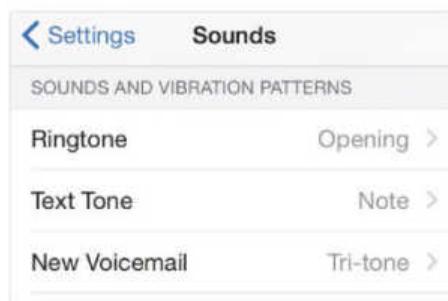
In this brief visit to Settings, you've probably noticed that it contains a vast number of other important security options and app-specific customisations. When you install more apps, they usually get added to the last group in the list. Here we'll give you just an overview of Settings. To find out exactly what it can do, explore it more deeply yourself! Remember, most settings are on/off affairs, so it's easy to revert them.

HOW TO | PERSONALISE YOUR iPad



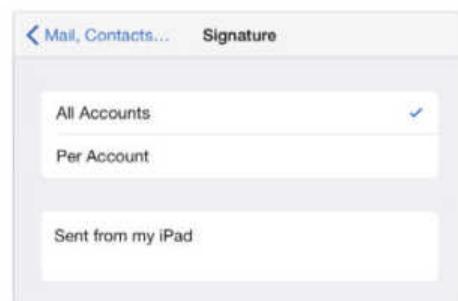
1 Change your wallpaper

Tap Settings > Wallpaper, then tap 'Choose a New Wallpaper'. You can choose from a range of still images or dynamic screens supplied by Apple, or use any of your own images – scroll down, tap an album, then the image you want. Pinch to zoom in and drag to move it to position it as you want. Tap Set, then Set Lock Screen, Set Home Screen or Set Both.



2 Configure sounds

Your iPad can play sounds in response to a selection of common events – receiving emails, tweets, FaceTime calls, and so on. To set what sound plays for these events, go to Settings > Sounds. Tap an event in the list and set a ringtone or alert tone, if any. If you're musically talented, you can create ringtones from scratch in GarageBand (see page 174).



3 Customise signatures

Want something more distinctive than the standard 'Sent from my iPad' appearing at the foot of your emails? Tap Settings > Mail, Contacts, Calendars > Signature. If you've got more than one email account, you can choose to set a different signature for each by tapping Per Account or the same for all your accounts by tapping All Accounts.

HOW TO | SEE WHAT'S WHAT IN THE SETTINGS APP

1 Connectivity info and options

Tap Settings and the first group of controls you see are those relating to your iPad's various network connections. Here you can switch to Airplane Mode, which disables all the device's radio and network activity, and turn Bluetooth on or off; you can also do both these things in Control Centre (see page 40). Tap Wi-Fi if you want to connect to a new wireless network – you'll need to select it and enter its password, but only the first time you connect to it; after this, your iPad will recognise it and join it automatically when relevant.

On an iPad with a SIM card slot, tap Mobile Data to set options relating to your data plan, to view your usage statistics, and to enable the Personal Hotspot feature, which enables your iPad to share mobile data to PCs and Macs over USB, and other devices over Wi-Fi or Bluetooth.

2 Notifications and controls

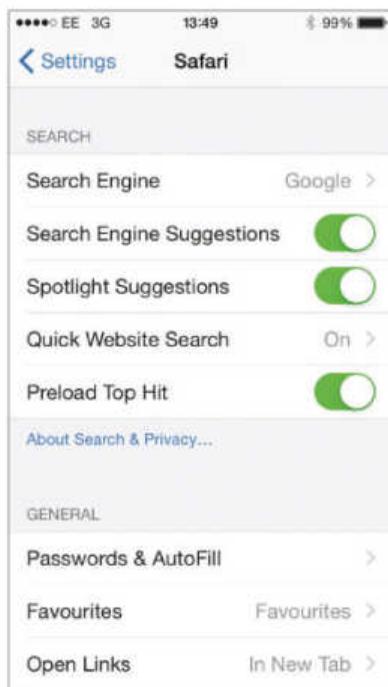
In the next group of options you can configure Notification Centre to choose which apps can send you alerts and how they do so (see page 32). You can set whether Control Centre can be accessed on your Lock Screen and within apps (see page 40).

3 General settings

Tap General to access a miscellaneous collection of configuration options for everything from the voice used by Siri, your iPad's built-in voice-activated 'personal assistant', to the formats you prefer for the date, time and keyboard. We'll look at many of the options under the various headings in due course. You can also tap Reset to revert various settings to their factory defaults should you need to do so (but this can't be undone, so be certain you want to do it). The Privacy options give you control over which apps can access personal data; they also work in tandem with the security features in Settings > General > Restrictions.

4 Settings for built-in apps

Further down are groups which configure the built-in apps and services, from everyday essentials, like Safari and Mail, to more specialist interests, like Game Center and the



Set your preferences for your apps in Settings. Tap a switch to change it from On (green) to Off (grey) or vice versa; tap an option with a right-pointing arrow to change the current setting displayed or configure more detailed settings, such as whether Safari will enter passwords and credit card details automatically.



Tap Settings > General > Accessibility for options designed to make iPads easier to use for anyone with sight, hearing or motor problems. Some options, such as Increase Contrast and Reduce Motion, make things clearer for all; others, such as VoiceOver, change things for the worse if you aren't dependent on them.

educational iTunes U. We'll look at many of this vast range of preferences when we look at individual apps, and it's worth taking the time to work your way through them all and set everything to your liking. Remember, you can simply come back here to change any setting again at any time.

5 Social networks

Next come the standard social networks with built-in support in iOS. Tap each one to sign in or create an account; if you haven't yet installed each network's official app, you can tap the Install button here. Once you've signed in, you can upload pictures to Facebook, share a link via Twitter, and so on, direct from the app you're using by tapping the Share button within that app. See page 75 for more about social network support on the iPad.

6 Other apps

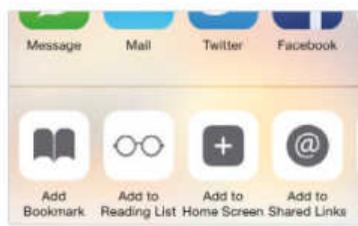
The bottom group in Settings contains other apps you've installed from the App Store – including some from Apple, such as iMovie, Pages, Numbers and Keynote. Options available vary from app to app; the BBC iPlayer app, for instance, merely displays its version number here, and its option to control the quality of downloads is available within the app by tapping Menu in the top-left corner of the screen, followed by the cog in the top-right corner. Many apps don't even appear in Settings, and you'll need to look out for a cog icon or a similar option within those apps.

Home screen shortcuts

We've all got favourite websites that we look at regularly, and it's easy to create shortcuts to make it faster and simpler to visit them anytime.

In Safari, go to the site you'd like to add. Once it's finished loading, tap the Share button at the top-right of the screen, then tap Add to Home Screen. Enter a short name, then tap Add. A shortcut to the site, with the name you gave it, will appear on your Home screen. This

works just like an app icon: simply tap it to open Safari and go straight to the site. (You can reposition or remove the icon, just like any other.)



Parental and security controls

Ensure you breathe easy when your children are using your iPad

Whether you're lending your iPad to your children or setting up an iPad of their own – perhaps your old one – you need to be sure that they'll be safe using it. Particularly if they're tech-savvy older children, you might want to ensure they won't be visiting inappropriate websites, installing and playing unsuitable games, or running up

huge bills buying extras as in-app purchases (IAPs). The box below explains how IAPs work. On several occasions since early 2013, Apple has agreed to refund millions of dollars to parents who discovered that their children had made purchases without their permission, but don't assume you'll just get your money back if your kids splash out on IAPs – changes to European legislation about downloadable content – music and video, as well as apps – means that sellers including Apple are now allowed to show a final confirmation that you waive your right to a refund by proceeding.

Keep them safe

The simplest and safest option is therefore often to disable IAPs entirely, which is easily done using your iPad's Restrictions options. You'll find these by opening the Settings app and tapping General > Restrictions. These include options to disallow access to a range of apps one by one, and to block web access by denying access to Safari – though

Setting up Restrictions is very easy, and you can tailor limitations for individual apps, prevent IAPs, and more.



What are in-app purchases?

Simply put, an in-app purchase (IAP) is any extra bundle of content or features that you can buy within an app, as distinct from in the App Store itself. IAPs are widely used to unlock added features, or to buy real or virtual goods. In games, for example, you might have to pay to unlock levels, acquire extra lives or power-ups, and so on. Some free apps turn out to be sparse samplers or

more-or-less empty 'containers', requiring you to pay for the actual content.

This is not to say that there's anything inherently bad about IAPs – they can be a perfectly fair and reasonable way to offer you extra content or options that you might not need or want to pay for up front, such as additional languages in a language-learning app, for example. The catch is that

you'll also want to prevent alternative browsers being downloaded, along with other apps.

This last option, however, won't always be suitable, for example where the children involved are older or will need to use the iPad to find information online. The alternative can be to set age-related restrictions, which can be applied to apps, websites and the various media sold in the iTunes Store.

It's important to note that it's not possible to set up multiple 'user accounts' on one iPad and switch between them, as you can on your Mac or PC: any restrictions will apply globally on that device until you change them – though there's a way to ensure only you are able to do that, which we'll show you.

Make an allowance

It is, however, possible to set up a separate App Store account for a child (aged 13 or over) and either set an allowance for this account or stop them downloading paid apps at all. This gives your kids a certain degree of independence and might be ideal if you're setting up an iPad for them to use on their own but want to prevent unexpected bills. Note that you can't swap between accounts: once you've signed in, you can't download purchases from another App Store account on the same device for 90 days.

If you want your kids to have a paid-for app once you've set up an Apple ID for them, you can gift the app from your own account, ideally from your own device. First, ensure you're signed in to the App Store with your own Apple ID. Now find the app, tap the Share button, then tap Gift and enter the email address of the child's Apple ID. To provide a monthly allowance to spend at any of the App Store, the iTunes Store or the iBooks Store, you'll need to use iTunes on a Mac or PC (see <http://apple.co/1P4Ko6G>).

you're spending real money, which might not be immediately obvious, particularly to young children or in the context of a game. As the US Federal Trade Commission noted, one person's daughter spent \$2,600 in the app Tap Pet Hotel and "other consumers reported unauthorized purchases by [their] children totaling more than \$500 in the apps Dragon Story and Tiny Zoo Friends".

HOW TO | SET UP RESTRICTIONS**1** Enable Restrictions

To access your iPad's parental controls, tap Settings > General > Restrictions, then tap Enable Restrictions. You'll now be asked to set a Restrictions passcode, which you'll need to enter if you want to make any changes to the restrictions later. Make sure it is NOT the same as the passcode you use to switch on or wake your iPhone – that's the first thing your children will be likely to try!

2 Allow or disallow apps

You can now disable key apps and features, including Safari, Camera, FaceTime, Siri, and AirDrop. You can also opt to block the three stores, by disallowing the iTunes Store and the iBooks Store by name, and turning off the switch next to Installing Apps to block the App Store. There are separate switches to prevent users deleting apps or making in-app purchases, so you can disable exactly the combination of features you want. Set a switch to off and the relevant app will immediately vanish from the Home screen.

3 Set age rating limits

Under the Allowed Content heading you can set age-related limits for different types of content on your iPad, including apps. Every app has a rating – to find it, search for an app in the App Store, tap its icon and scroll down to the Information section. Limiting apps by age rating hides those rated for older users from the Home screen. Your child will still be able to find those apps in the App Store, but the Open button on an installed app's page will be disabled.

4 Require password immediately

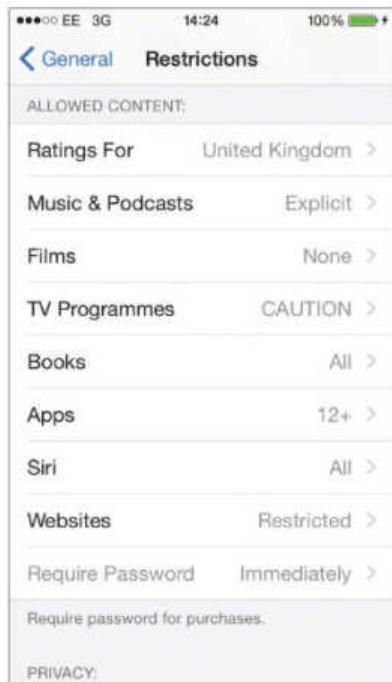
By default, when you buy an item in the App Store or as an IAP, you can buy more things without re-entering your password for 15 minutes. If you buy something for your kids and hand them the device, this means they have 15 minutes of free rein on your account. To prevent this, tap Require Password and change the time setting to Immediately. Now the password must be entered for every purchase, no matter how recently the last one was authorised.

5 Privacy options

Under Privacy, you can prevent apps from accessing your location, contacts, calendars, reminders, Twitter and Facebook information, or sharing data over Bluetooth. Tap Location Services, for example, to see a list of apps that have requested use of that service. If you want your kids to be able to find their location in Maps, say, set Maps to on but other apps to off. Then tap Don't Allow Changes to lock these settings in place. Note that Don't Allow Changes does not act as a blanket 'disable' switch; it just prevents users and apps from altering the settings you've made. Be aware too that some apps may already have imported and stored your contacts, so those details might still show up in those apps.

6 Disallow changes

Under the Allow Changes heading you can lock in the current settings for your personal accounts (Mail, Contacts and Calendars), and some other features not covered by the other headings. If you tap Don't Allow Changes in these



You can specify age ratings for apps, sites and different content, such as explicit lyrics in music.



You can specify which apps can be privy to your whereabouts under Location Services.

categories, neither apps nor users will be able to add, modify or delete accounts – this stops Find My iPad being disabled!

7 Game Center options

The final set of Restrictions relate to Game Center, your iPhone's social hub for games. Switch Multiplayer Games off and users of your iPad won't be able to request a match, send or receive invitations to play games, or add friends in Game Center. Switch Adding Friends off and they can't make or receive friend requests in Game Center either – but if Multiplayer Games is on, they can continue to play with existing friends.



In 2013, Apple refunded the parents of an eight-year-old boy who had blown £980 on virtual doughnuts in the 'freemium' game The Simpsons: Tapped Out. You may prefer to prevent your kids splashing out in the first place!

Using the keyboard

Find your way around the on-screen keyboard and type more quickly

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9

Y

our iPad isn't just for looking at things other people have made. Its on-screen keyboard makes entering text as easy as on a mechanical keyboard, whether it's a tweet, a note, an iMessage or a larger amount of text in Pages that you want to type.

Here we'll look at some of the features and shortcuts offered by your iPad's virtual keyboard, which will pop up automatically whenever you tap somewhere that permits text entry – for example, in the 'To' field or message body in Mail, the search field in Safari, or when setting up a reminder.

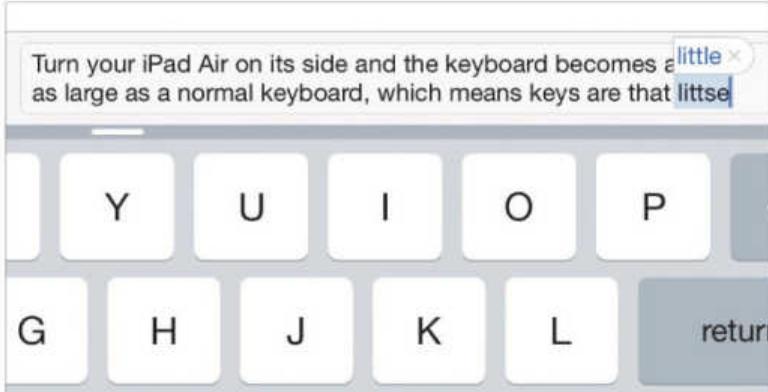
Bear in mind that you can usually turn your iPad on its side and use the keyboard in landscape orientation, which makes the keys every bit as large as on a typical physical keyboard (albeit in a slightly different layout, with the numbers hidden at first) and less fiddly for fat fingers. If you prefer, you can even hold your iPad with two hands and type with your thumbs, mobile phone-style, rather than your fingers.

You can configure many aspects of the iPad's keyboard under Settings > General > Keyboard. There are lots of features here to help you enter text – have a look at the options and try them out to see how useful you find them!

Double-tap on a suspect word to select it, then in the pop-up menu of options (left) select Replace... to see suggested alternatives (right). Simply tap the one you want, or tap elsewhere to keep what's there.

Trust autocorrect

The biggest tip we can give is to leave auto-correction turned on, and learn to trust it. If it makes a suggestion you want to accept, carry on: it will be accepted when you type a space or punctuation



If you've hidden QuickType's predictive text suggestions, the iPad's autocorrect feature will offer suggestions in a pop-up next to a word it thinks is wrong, and insert this suggestion if you type a space or punctuation mark. To reject its suggestion before this happens, tap the pop-up and it will leave what you actually typed.

mark. To reject it, tap the leftmost of the QuickType bar's suggestions (the one in quotes). If you've hidden QuickType (see page 50), the suggested correction appears in a pop-up next to the word you typed; tap the X on it to reject it – or, to avoid breaking the flow of your typing, finish typing, and then make corrections afterwards. It might take a while to get used to typing this way, but it should ultimately save you a good deal of time and effort.

New sentence

If you double-tap the spacebar when composing a message or using text-based apps such as Notes or Mail, the app will insert a full stop followed by a space, and automatically capitalise the next letter you type. (This option is on by default but can be turned off in Settings > General > Keyboard.)

Manual Caps Lock

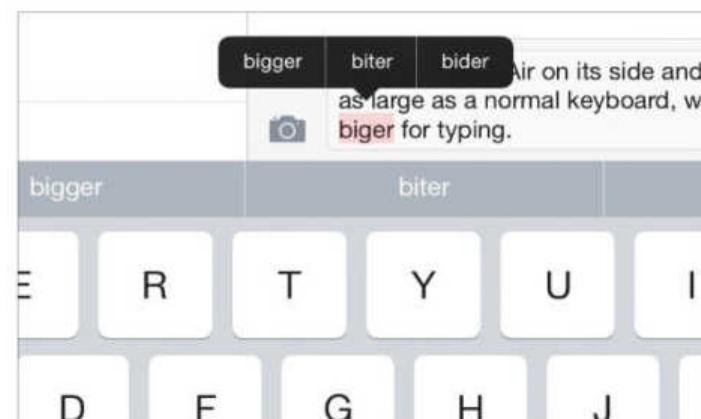
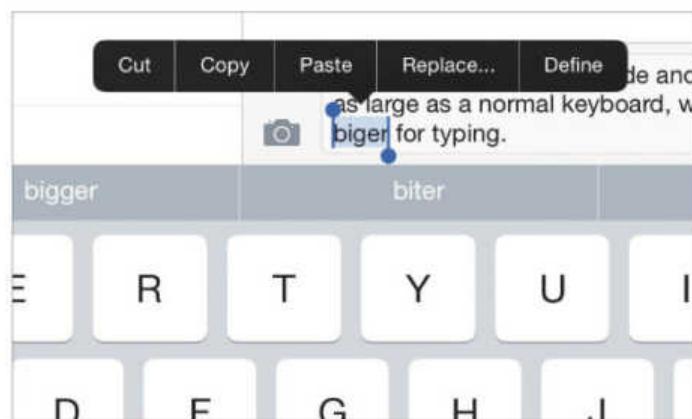
If you don't want to capitalise the first letter of a new sentence (say if you're starting a sentence with the word "iPad"), tap the Shift key. If you want to type a whole word in caps (say an acronym such as NATO), double-tap the Shift key and type away. Tap the Shift key again to turn off Caps Lock.

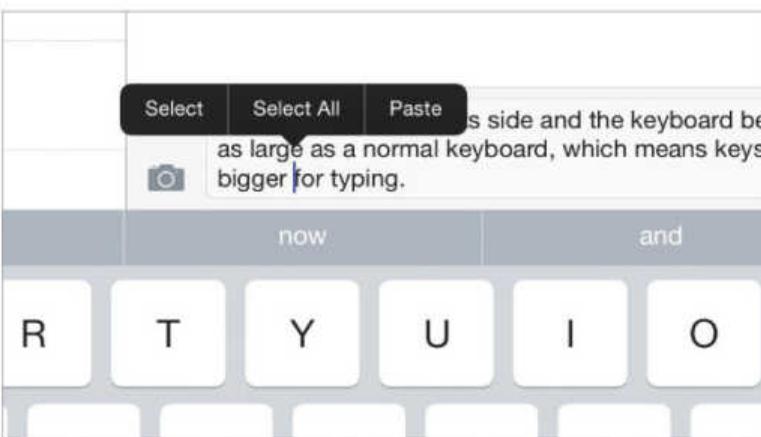
More characters

Numbers and punctuation marks are on a second screen, which you access by tapping the .?123 key at the bottom-left corner of the keyboard. For additional punctuation and symbols, tap the #+= key on the second screen.

Slide to the right key

Didn't quite hit the right character? Keep your finger pressed down and just slide it over to the one you meant. In the



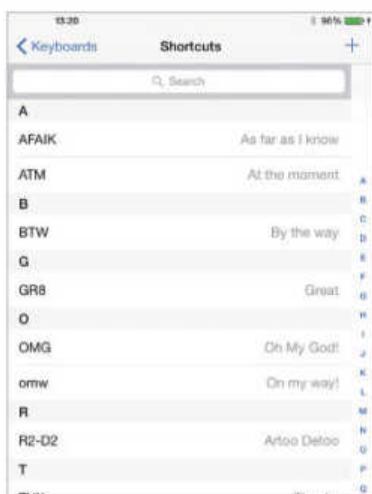


Tap on your text for options to make a selection or paste text you've previously copied to the clipboard.

same way, you don't have to tap the Shift key and then the character you want to capitalise: instead, tap and hold the Shift key and then slide your finger to the letter before releasing. This also works for typing characters from the second keyboard screen: tap and hold the .?123 button to switch keyboards and then slide your finger to the correct symbol before releasing.

Alternative characters

If you tap and hold on some characters on the keyboard you'll see alternatives – accents for letters such as é and ç and even more symbols on the second and third screens. For example, the hyphen key offers the alternative of an em-dash (–), the full stop on the second keyboard screen gives the option of an ellipsis (...); tap and hold on the pound sign to find dollar, euro and yen symbols; tap



Do you find yourself typing the same long phrase on a regular basis? Go to Settings > General > Keyboard > Shortcuts to define short sequences of characters that magically turn into whole phrases as soon as you've typed them.

and hold on the quotation marks if you want proper typeset curly quotes.

Adding keyboards

Need to type accented characters or foreign alphabets on your iPad? You can add keyboards for other languages and quickly switch between them. Go to Settings > General > Keyboard > Keyboards to enable them, then tap the globe icon that appears at the bottom-left of the on-screen keyboard to toggle between them. In the App Store, go to Explore > Utilities > Featured Utilities to find apps that add new keyboards. Many of them provide entirely different ways to type than the built-in keyboards, such as swiping between keys rather than tapping each one you want to press.

Magnifying glass

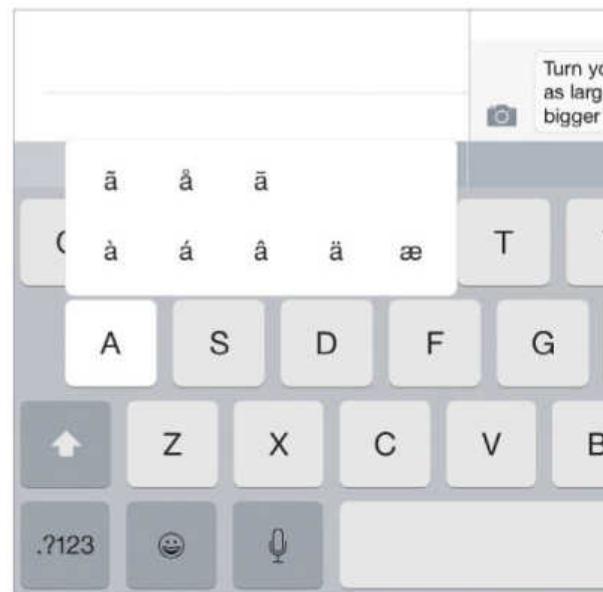
If you need to position your cursor precisely in text – such as to correct a mistake – tap and hold on the text to bring up a magnifying glass and then slide your finger around to enlarge different areas as you move it.

Copy and paste

To quickly copy and paste text, tap and hold for a moment, until the magnifying glass appears, then let go and choose Select from the menu that appears. Drag the blue handles this reveals to highlight the text you want, or choose Select All. Now tap Copy, then go to your target location or app, tap and hold again, then release and choose Paste. The copied text will be inserted at the current cursor position. To replace some existing text, select it before pasting.

Selection tips

To quickly select a word, double-tap on it. To select an entire paragraph, tap



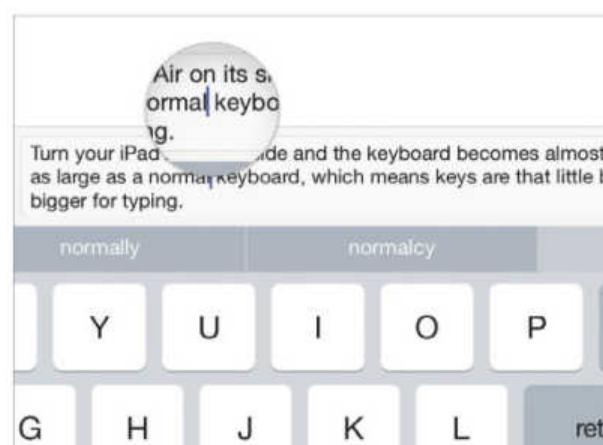
Tap and hold on a character in the on-screen keyboard to see alternatives. Slide your finger to the one you want, and then release to insert that character.

Replace a word

When you tap to select a word, you'll often see another option: Replace. Tap this for suggestions of alternative words with similar spellings. This is a good way to quickly correct typographical errors, but not every app supports it. Similarly, you can often choose Define to get an explanation of the highlighted word.

Clearing text fields

Keep an eye out for the x symbol in text fields (such as in Safari's search field): instead of tap-tap-tapping the Delete key to clear text, you can just tap this symbol to clear the text at once. Alternatively, many text fields automatically clear when you start typing after tapping on them.



Master keyboard shortcuts

Use the iPad's keyboard shortcuts to make touchscreen typing faster

SKILL LEVEL

Anyone can do it

IT WILL TAKE

15 minutes

YOU'LL NEED

iPad, iOS 9

W

hen Apple unveiled the iPad, it was confident users would be able to touch-type on the touchscreen tablet accurately

and efficiently. It's testament to Apple's keyboard design that many of us have come to use our iPads in place of laptops. Nonetheless, it's not quite as fast to type on as a standard computer keyboard, and over the years Apple has tweaked the keyboard to make iPad typing easier.

There are lots of ways to make typing on your iPad faster. For example, you could

'split' the keyboard so the keys fall more naturally under your thumbs and typing is more like using a mobile phone keyboard. Alternatively, you can use a Bluetooth keyboard and eschew touchscreen typing altogether for a computer-like experience.

But if you simply want to make your typing more efficient, you just need to master some of the hidden shortcuts that Apple has built into the iPad with exactly that objective in mind. Here we show you the shortcuts that will make the most noticeable improvements to your typing.

If you want to make typing more efficient, master some of Apple's hidden shortcuts

VISUAL GUIDE | GET MORE FROM THE iPAD'S KEYBOARD

With these tips, you'll soon be speed-typing...

Insert special characters

1 To insert special characters such as a circumflex (^) or tilde (~), tap and hold the letter on which you want it to appear. Alternative character options will appear above the letter. Slide your finger over the character to insert, then let go.

Speedily insert numbers

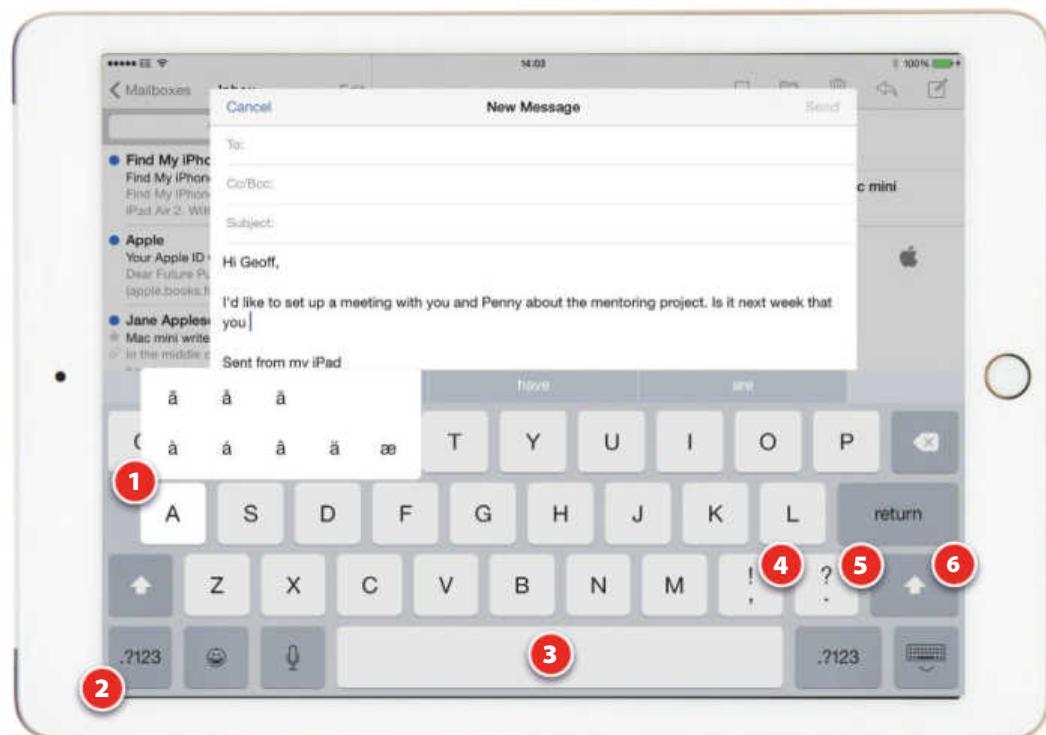
2 The iPad has separate keyboards for letters and numbers which you can switch between by tapping the .123 or ABC keys. To quickly type a mix of numbers and special characters, hold your finger on the .123 key and tap the characters you need to insert. Release the .123 key to revert to the alphabetic keyboard.

Format your document

3 If your message is becoming lengthy, you can break it up by starting a new paragraph. Double-tap the spacebar to insert a full stop followed by a space, and then press Return to add a line break and to start a new paragraph with a capital letter.

Add apostrophes

4 When you add a third 'l' to 'well' you'll get "we'll", and "we've" will produce



"we've". Alternatively, insert an apostrophe by holding the comma key for a moment.

Easy web extensions

5 When typing a web address into Safari, you can access shortcuts to .com, .co.uk and other domain extensions by holding the full stop key, then sliding

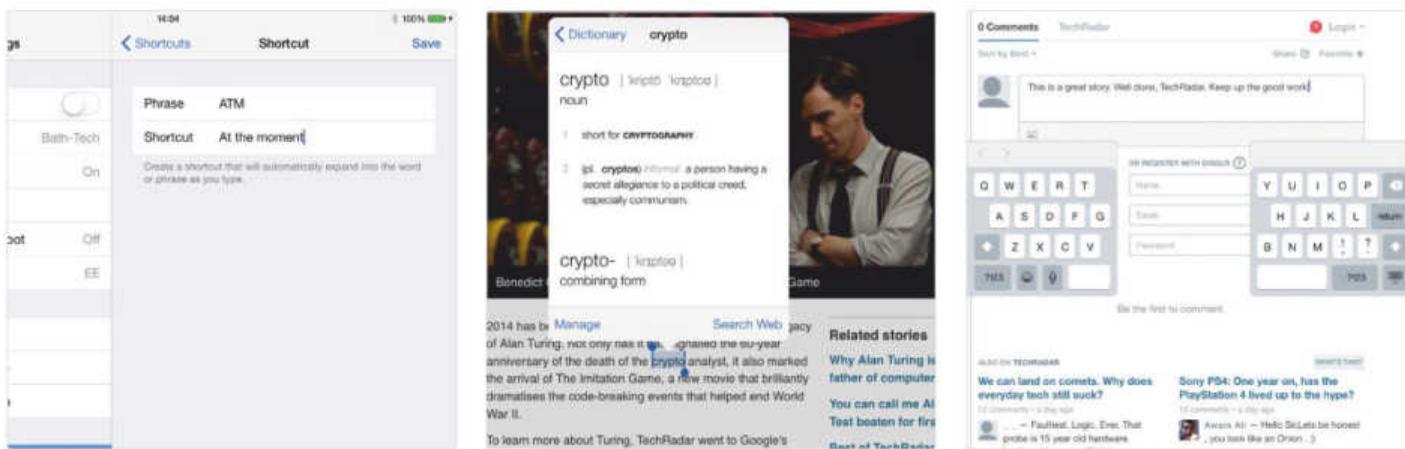
your finger to the one you want. If you simply let go, the default extension for your country (in Settings > General > Language & Region > Region) is added.

Turn Caps Lock on and off

6 In some instances, the iPad will recognise that a word is usually

capitalised and will automatically cap up the first letter for you. To add your own capitalisation, you usually tap the Shift key to make the next character uppercase. To type in uppercase just double-tap the Shift key. Tap Shift again (which now has a bar below the arrow, like a computer's Caps Lock key) to return to lowercase typing.

HOW TO | USE KEYBOARD SHORTCUTS IN ALL YOUR iPAD APPS



1 Create shortcuts

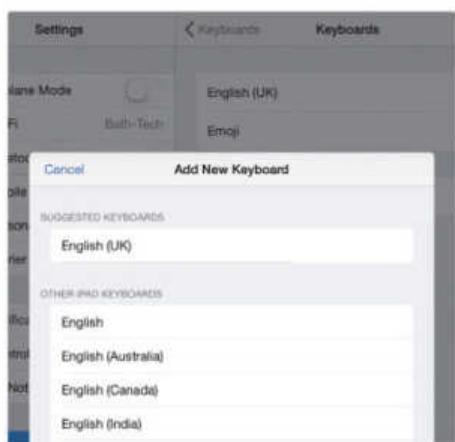
You aren't limited to the iPad's existing shortcuts. You can create your own shortcuts in Settings > General > Keyboard > Shortcuts. Tap the + at the top right, then type in the phrase or word you want to create a shortcut for. Choose a sequence of characters that you'll type when you want the iPad to insert the full phrase. Make sure it's not a sequence that you'd type for any other reason. You need to use at least two letters or characters as your shortcut.

2 Consult the dictionary

The iPad has a spellchecker it consults before correcting words. You can use its dictionary to check spellings and definitions too: just double-tap a word, then tap Define (you may need to tap the arrow at the right of the bar that opens to find it). This reveals a list of definitions for you to check you've used the right word. If you see 'No definition found', tap Manage, and in the list of dictionaries, tap the cloud next to the one you want to download.

3 Split the keyboard

At the lower-right of the iPad's keyboard is a large keyboard icon. Tap and hold this to bring up the Split or Undock options. A split keyboard separates the keys horizontally so that half of the keys naturally fall under each hand. (There are 'invisible' keys at the innermost edges of the two parts that replicate the nearest key from the other side.) If you choose to undock the keyboard, it can be repositioned further up the screen dragging from the bottom-right key.



Keyboards



There are lots of shortcuts built into iOS that make using a Bluetooth keyboard with your iPad easier. Some of these are familiar from using a Mac or Windows computer as they use the Command (⌘) key plus a letter that corresponds with the action. For example, ⌘+N creates a new document, email message or brings up a new web page. You can tap ⌘+⇧+Z to redo changes you've just undone using ⌘+Z. ⌘ and the up or down arrow takes you to the start or end of the document, respectively. Not all shortcuts are obvious. ⌘+D deletes everything back to the start of the current line, while ⌘+K deletes everything to the end of the line.

4 Switch keyboards

If you have more than one keyboard active, just tap the globe icon to switch from the current one to an alternative keyboard. The globe only appears if multiple keyboards are enabled. To enable additional keyboards, go to Settings > General > Keyboard > Keyboards > Add New Keyboard. Scroll down and tap any additional keyboards you want to use. Add Emoji if you like to include emoticons, such as smileys and winks, in your messages.

5 Dictate your text

You don't even have to type, because the iPad has a built-in speech recognition capability. Ensure the Dictation switch is on in Settings > General > Keyboard, then tap somewhere you need to enter text. To the left of the keyboard's space bar is a microphone icon. Tap it and the keyboard will be replaced by an animated waveform. Your words will appear on screen shortly after you say them. Tap Done when you're finished to bring back the keyboard.

QuickType word suggestions

Type with confidence using predictive text

SKILL LEVEL

Anyone can do it

IT WILL TAKE

A few minutes to learn, and longer to adapt

YOU'LL NEED

iPad, iOS 9, an app that allows free-form text entry

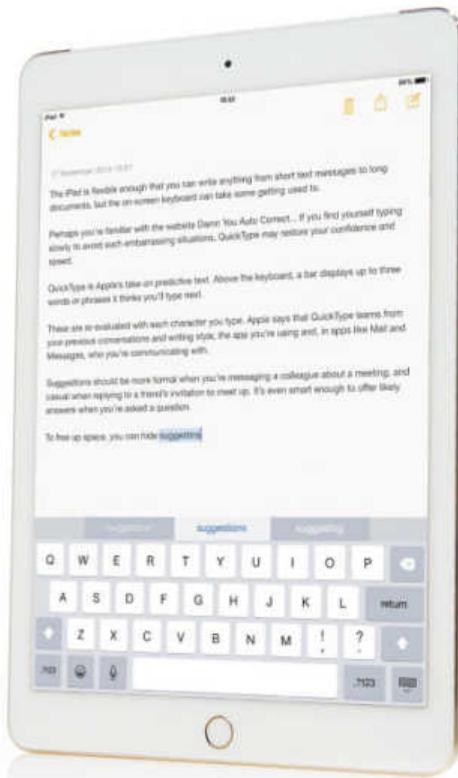
The iPad is flexible enough that you can write anything from short text messages to long documents, but its on-screen keyboard can take some getting used to. If you find yourself typing slowly to avoid embarrassing situations like those shown on the *Damn You Auto Correct...* website, QuickType may restore your confidence and speed.

QuickType is Apple's take on predictive text. Above the keyboard, a bar displays up to three words or phrases it thinks you'll type next. These are re-evaluated with each character you type. Apple says that QuickType learns from your previous conversations and writing style, the app you're using and, in apps like Mail and Messages, who you're communicating with. Its

suggestions should be more formal when you're messaging a colleague about a meeting, and casual when replying to a friend's invitation to meet up. It's even smart enough to offer likely answers when you're asked a question.

To free up space, you can hide suggestions by swiping down from one. Swipe up from the thin bar that results to get suggestions back. QuickType can be turned off altogether in Settings > General > Keyboard > Predictive.

Apple says that QuickType learns from your previous conversations and writing style

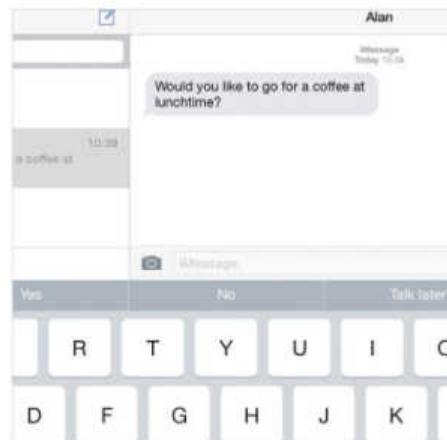


HOW TO | USE QUICKTYPE SUGGESTIONS



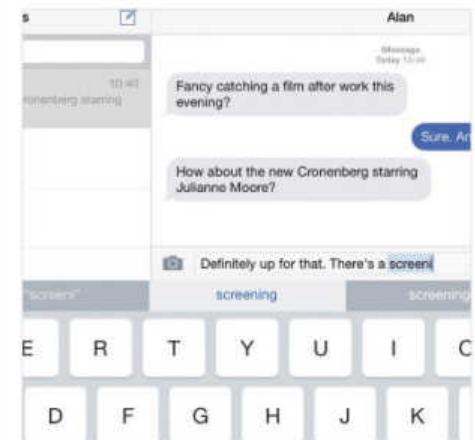
1 Reveal the keyboard

Tap somewhere that accepts text input to make the keyboard appear. Above it should be a grey bar with three suggested words – even before you type anything. Note that this bar doesn't appear everywhere you can type. You won't see it when adding recipients' names to an email, but it will be available when writing the body of an email or other free-form text.



2 Suggested words

When a message poses a question, QuickType offers appropriate responses. If none of the suggestions is what you want, just keep typing and new ones will appear. You may end up typing the whole word. Tap a suggestion to complete that word and to add a space after it. If the word you tapped is the end of a sentence, double-tap the space bar to add a full stop.



3 QuickType subtleties

Tapping the suggestion in quotes (the one on the left) finishes the word exactly as you typed it and adds a space. Sometimes one of the suggestions will appear in blue type against a lighter background than the others. You don't even need to tap this word to select it. Just type a space and it will be automatically completed and, once again, a space will be added after it.

Improve autocorrect

Make typing easier with a few careful tweaks

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9

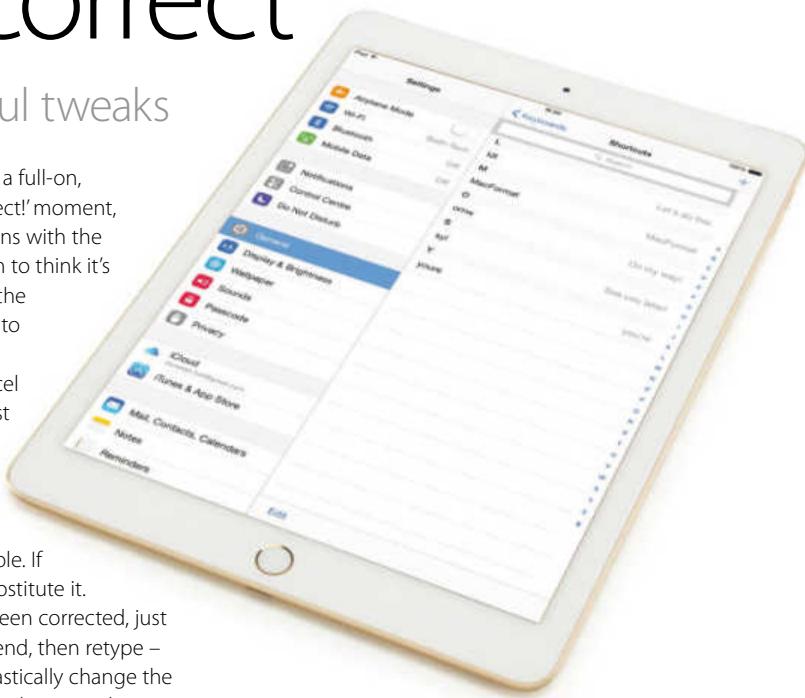
E

ven if you've never experienced a full-on, mortifying 'Damn you, autocorrect!' moment, you've probably still had irritations with the system on your iPad. We happen to think it's quite good, but even if you opt to switch off the Predictive feature it's still useful to know how to manage autocorrect.

The first thing to know is that you can cancel corrections, either as they're happening or just after. If iOS is going to correct a word as you're typing and you've turned off the Predictive setting, a bubble pops up next to the word, telling you what will replace your typing. To stop it changing, tap the bubble. If the word is right, just tap the space key to substitute it.

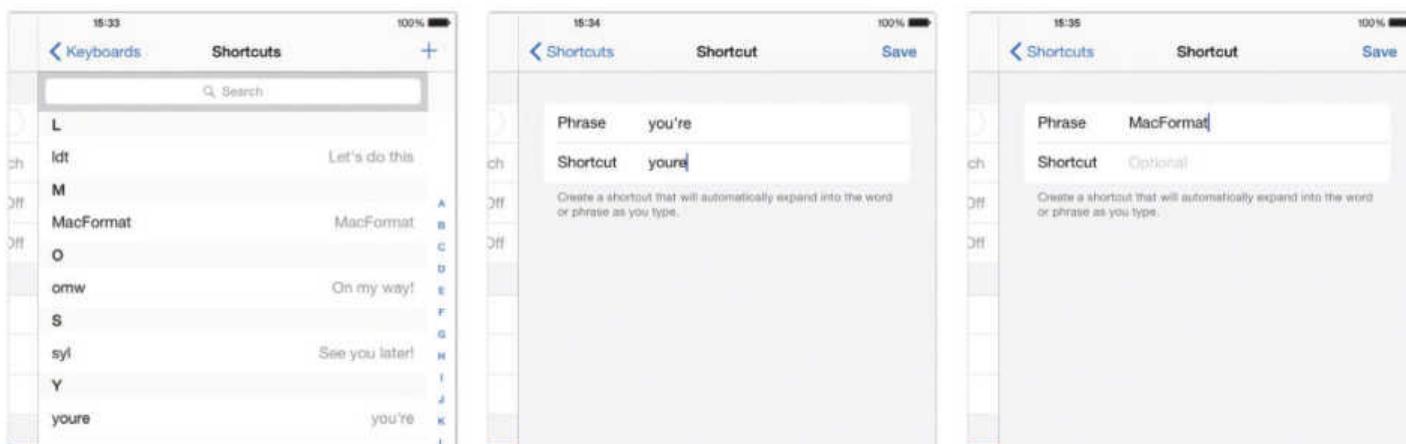
If you realise after typing that a word has been corrected, just tap backspace to delete characters from the end, then retype – autocorrect won't kick in again unless you drastically change the word. When you fix autocorrect's changes, the dictionary learns your new words, so it won't bug you for corrections next time.

You can turn off autocorrect in Settings > General > Keyboard, and if you feel you'd be better off starting over with the autocorrect dictionary afresh, simply reset it in Settings > General > Reset > Reset Keyboard Dictionary.



To reject a suggested correction, tap the bubble that contains it; to accept it, tap the space bar

HOW TO | CHEAT WITH TEXTEXPANDER



1 Text shortcuts

The Shortcuts feature in Settings > General > Keyboard enables you to set short sequences of characters which, when typed, will be replaced with longer phrases of your choosing. Apple's predefined example is that you can just type 'omw' and have it automatically be expanded to 'On my way'. The feature ties into autocorrect, so can be used in cunning ways.

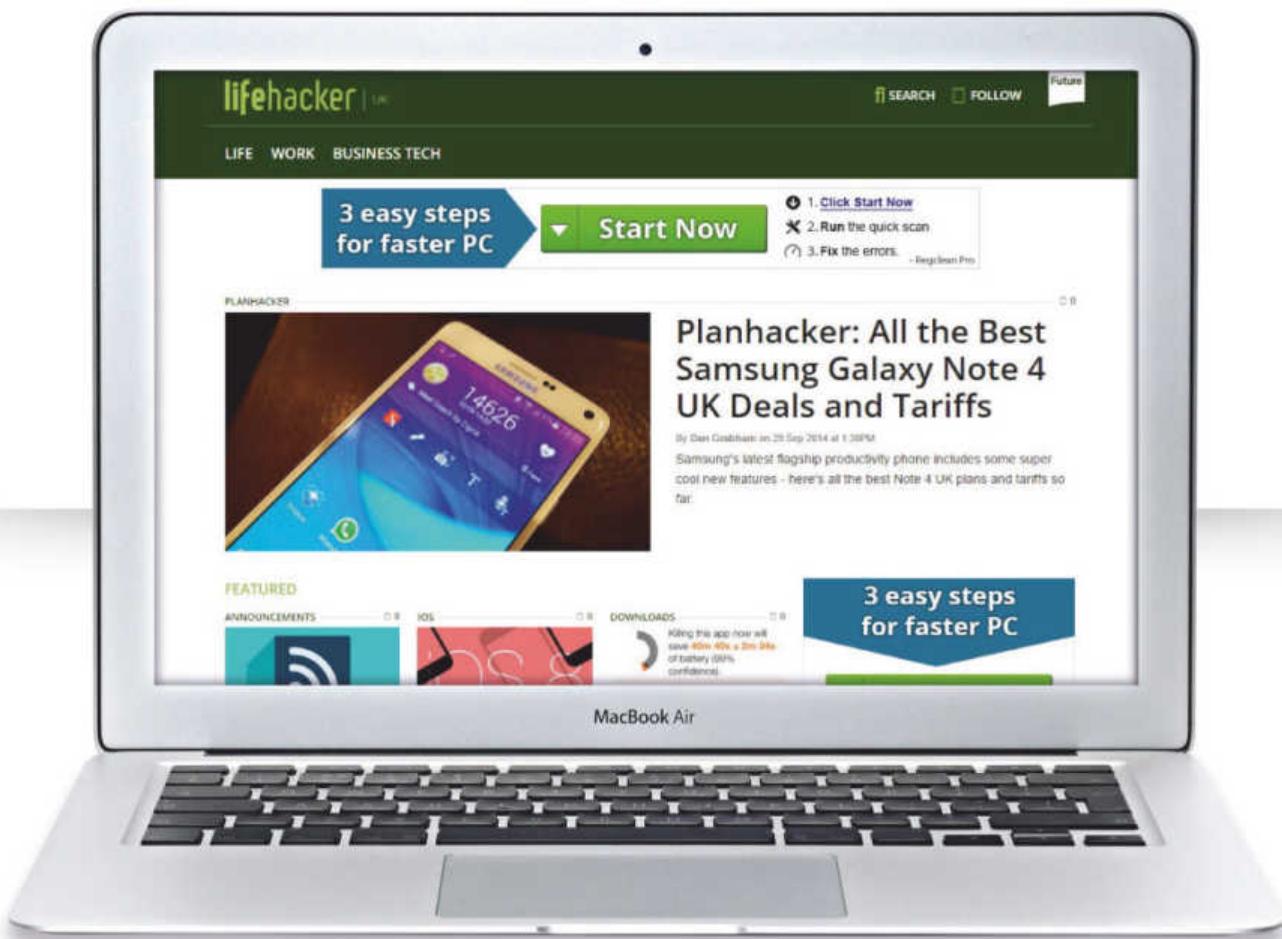
2 Specific replacements

If you've accidentally made autocorrect learn a common mistake that it should be correcting (something like 'youre'), you can use a shortcut to fix it. Tap the + sign (top-right). Next to Phrase, enter the correct word. In the Shortcut field, type in the one you incorrectly typed before. Tap Save, and now when you write the latter, it changes to the former.

3 Manually add words

If you want to add a word to autocorrect's library in advance, add a new shortcut. Type the word you want, correctly capitalised, into the Phrase field. Don't put anything in the Shortcut field. Tap Save and the word is effectively added to autocorrect's dictionary. To remove an entry from the list of shortcuts, swipe leftwards across it and then tap the Delete button that appears.

Helping you live better & work smarter



LIFEHACKER UK IS THE EXPERT GUIDE FOR ANYONE LOOKING TO GET THINGS DONE

- Thousands of tips to improve your home & workplace
- Get more from your smartphone, tablet & computer
- Be more efficient and increase your productivity

www.lifehacker.co.uk



twitter.com/lifehackeruk



facebook.com/lifehackeruk

Express yourself with emoji

Replace words with smileys and other emoticons

SKILL LEVEL

Anyone can do it

IT WILL TAKE

A couple of minutes

YOU'LL NEED

iPad, iOS 9



Like peppering your Facebook posts, tweets or Messages conversations with smiley faces and other illustrative symbols? If so, you'll be pleased to see that iOS 9 comes with emoji images built-in.

They're available from an extra keyboard containing hundreds of graphical symbols – everything from straightforward smiley faces to animals, weather symbols, seasonal figures, buildings and various symbols. If you're struggling to express yourself with words, then take a trip to the emoji keyboard to see if a colourful graphic can better convey your message. (Or if you decide you don't want it, you can remove it by going to Settings > General > Keyboard > Keyboards and tapping Edit.)

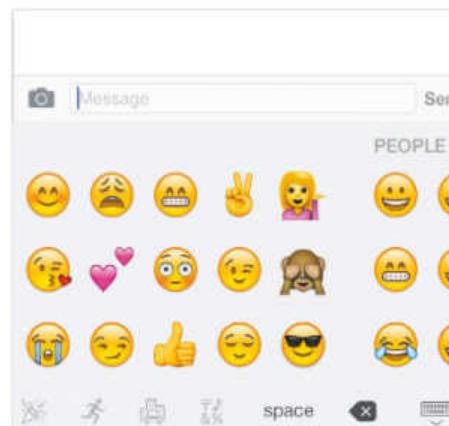
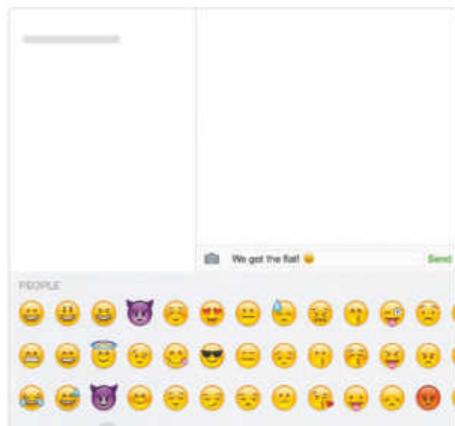
Sometimes it can be tricky working out which emoticon to use, particularly when you have such a varied choice available. Sadly, there's no explanation provided when you tap and hold on a single emoji symbol, but there's a handy website, emojipedia.org, where you'll find a detailed explanation – including title, description and images – of every single emoji on your iPad's keyboard, conveniently divided into the same categories as found on the keyboard itself. The site even provides similar alternatives for when your emoji doesn't quite hit the mark.

Note that some emoji might not display correctly (or at all) on computers and devices not using iOS 9 or OS X El Capitan, but that's also true of any special characters.



It's really fun to use emoji in your messages and posts on social network, and there are hundreds of them to choose from, organised into categories for easy selection.

HOW TO | ACCESS AND USE THE EMOJI KEYBOARD



1 Tap away

The emoji keyboard is available as standard in iOS 9, so as soon as the keyboard opens you'll see a smiley face (or a globe if multiple keyboards are enabled) near the bottom-left of the keyboard. Tap it for a bank of smiley icons. Inserting one into your post or document works like the regular keyboard: just tap one and it'll appear at the cursor's position.

2 Find more emoji

Dozens of icons are displayed on-screen, yet there are hundreds more. Swipe horizontally to scroll through them all, or tap one of the grey icons at the bottom to jump straight to a category. Each category has many more icons than are initially shown. You can tap and hold on some emoji – some of the faces and the thumbs up, say – to type in different skin tones.

3 Tips and tricks

The clock key gives you easy access to your most recent and often used emoji, making it faster to use your favourites. The backspace key is located near the bottom right-hand corner of the emoji keyboard, but works in the same way as on the normal keyboard. To return to the standard QWERTY keyboard, tap the ABC key in the bottom-left corner of the keyboard.

Get more at the App Store

It's at the heart of your iPad, with apps for just about anything



Your iPad's built-in apps include the Safari web browser, Mail, music and video players, and around a dozen or so others. At some point you'll want more – perhaps some games, new photo-editing tools, and alternatives such as Amazon's Kindle ebook reader.

There are apps to cover almost any subject matter you can think of, from education to travel, from business and finance to games. You can find new apps for your iPad and install them through

the App Store, which is also built into iOS.

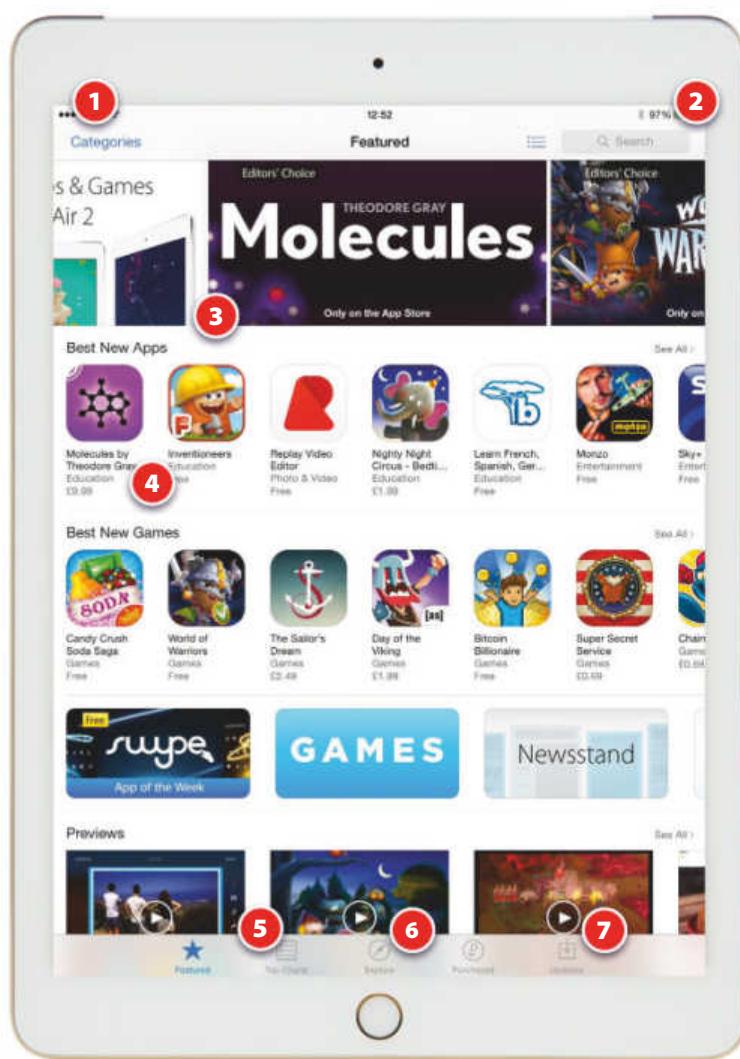
When you open the App Store app, you're greeted by the Featured section, offering Apple's suggestions of great apps, but there are lots of ways to find out what's available: you can search, view the charts, or just browse through the categories, among others. When you find an app you're interested in, simply tap its name or icon to find out more about it.

On an app's page you can view screen shots of it (swipe from right to left to see more of them) and scroll down to find

more information including how much storage space the app will take up when downloaded, who its developer is, what ages it is suitable for, and which devices it works with. There are also user ratings and reviews, for both the latest version and any previous ones – so you can see what, if anything, has been improved.

You can tap the Share button at the top of the screen to tell a friend about the app you're viewing, post a link to it on social media, share it with someone nearby via AirDrop, or even gift the app

VISUAL GUIDE | THE APP STORE IN iOS 9



Search for an app, or browse by category

Categories

1 If you want to narrow your search to apps of a specific type, tap here to open the complete list of categories and tap one to browse within it. There are more than 20 categories to choose from, including Finance, Education, Lifestyle, Reference, Productivity and even Weather.

Editors' Choices and themed collections in such groupings as 'Staying In' and 'Kids'.

Charts

2 Tap the buttons at the bottom for different views of what's new on the App Store. There are lots of hot picks and collections of apps. Check the charts to see what is proving popular with other people.

Search

3 The search field makes it easy to find apps to download: just tap it, type and it'll suggest results on the fly. This is also the only way to find apps designed for iPhone on your iPad – most will work on it.

4 Tap Explore to see what's popular with people near your current location (you'll be asked to give permission for this to be used). This could be handy if you want a local guide app, for instance. This page is another way to browse by category, and it highlights popular apps in each one.

Editors' Choice

5 Apple promotes certain apps on the App Store as Editors' Choices. These are usually flagship games and innovative apps, although not all the apps featured here are necessarily the best in their particular category.

6 Tap Explore to see what's popular with people near your current location (you'll be asked to give permission for this to be used). This could be handy if you want a local guide app, for instance. This page is another way to browse by category, and it highlights popular apps in each one.

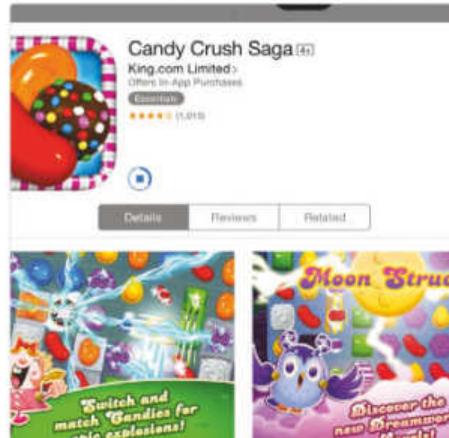
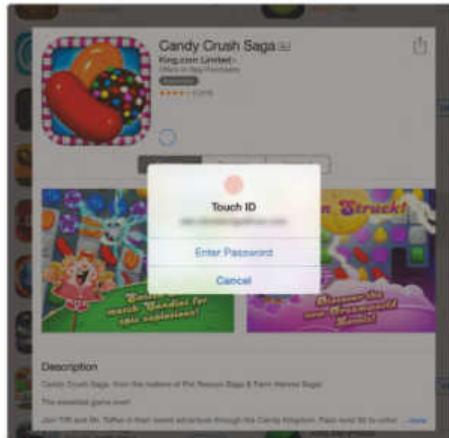
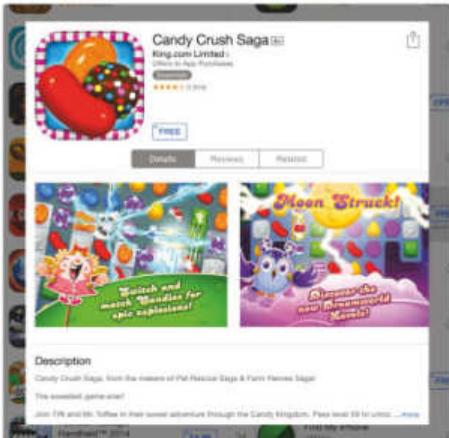
Best New Apps

6 Scroll down for Apple's picks of new apps, games, past

Updates

7 Keep your apps up to date, as great new features are often added to them. This button displays a red badge when updates are available for installed apps; tap on it for details of what's new and to manually install updates.

HOW TO | INSTALL APPS FROM THE APP STORE



1 Buy, or bag a freebie

Tap on an app's name and you'll see details about it, including the latest version number, age rating and information about what it does. Tap Reviews to see what others think about it, or tap Related to see similar apps. To buy an app, tap on its price, then on the Buy button. (If it's something you've purchased before, tap the cloud with an arrow pointing downwards – you won't have to pay again.) If it's a free app, tap on the word Get, then on Install.

to someone. Tap on Related to discover other apps by the same developer, or tap the link that's provided for every app to visit its developer's website, where you can also often get support for the app if you're having trouble.

If you've decided you want the app, you can download it by tapping on its price or the word 'Get' – see the guide above. (An estimated 90 percent of apps in the Store are free.)

There are now more than a million apps available in the Store, and they're not only easy to get, they've also all been vetted by Apple before being made available. Some commentators see this level of control as excessive, and there are indeed some whole categories of apps that Apple just won't pass (including pornographic material and anything that merely replicates the functions of an existing built-in app).

For users, however, this safety net does mean you can be confident that any app from the Store won't steal your passwords or do anything else naughty, and that it has passed at least some basic reliability testing. In addition, the age rating system that goes with this makes

2 Enter your password

You'll be asked to enter your Apple ID's password, or to place your finger on the Home button to confirm using Touch ID. Your Apple ID will be filled in automatically if you've signed in to your iTunes account before. If you've recently made a purchase, by default you won't have to enter your password again to make another within 15 minutes. You can change this in Settings > General > Restrictions > Enable Restrictions > Require Password.

it possible to protect your children from inappropriate content when they're using your iOS device.

Mags and Newspapers

Magazines used to be treated slightly differently once they were downloaded from the App Store: they would be stored on your iPad's Home screen in a special folder called Newsstand and you could access this sub-section section of the Store to discover more from there. However, with the advent of iOS 9 these publications have been returned to the App Store fold: to find some of your favourite magazine titles or check out some new ones, tap Explore > Magazines & Newspapers, then a sub-category if you wish. Usually, the magazine app itself is free to download, but this is generally just a container for the content, meaning that to read issues you'll have to pay for a subscription or (less commonly) for single issues.

Some apps are similar, in that they don't cost you anything to download, but offer extra things that you might want to buy, such as further levels for a game or a new set of filters in a photo-editing

3 Carry on browsing

When you've entered your password, tap OK and the download will start. You can carry on using the App Store or other apps. The Price/Install button changes to show the progress of the download; tap it if you want to stop for any reason. When the download is finished it turns into an Open button. The app can be opened from your Home screen too, where you'll find it on the second screen or, if that one's full, on the next one to the right with an available space.

app. You can buy these as in-app purchases (IAPs), which are payments that use the same secure system as the App Store but don't require you to leave their app to download them, hence their name. If an app offers in-app purchases, you can find out about these on the app's info page before you install it, which gives you some warning of potential costs down the line.

If you delete an app but decide you'd like to have it back, don't worry – you don't need to buy it again: tap Purchased at the foot of the Store and you can download it again for free, even on another iOS device, provided you've linked it to the same Apple ID.

You have the option to keep your iPad apps up-to-date automatically: go to Settings > iTunes & App Store. Under Automatic Downloads, switch Updates to on. On Wi-Fi + Cellular equipped iPads, there's also an option to use mobile data for automatic downloads (and for iTunes Match and Apple Music should you have a subscription to either of those services). However, just beware of enabling this if you're not subscribed to a network tariff with an unlimited data plan.

EBOOKS

Though there is a Books section in the App Store, it's intended for app-style interactive books. If you want ebooks with more traditional long-form textual content, you need to go to the separate iBooks Store, which you can access via Apple's iBooks app (page 134).

iPad

14:49

All Genres ~



Countdown to Compton
Dr. Dre

Watch the doctor discuss the inspiration for his new album.

HOT TRACKS >



The Making Of

The Bohicas - The Making Of (Bonus Track...)

...



Drag Me Down

One Direction - Drag Me



Don't Be So Hard On Yourself

Jess Glynne - Don't Be So Hard On Yourself...

...



Omen (feat. Sam Smi

Disclosure - Omen (feat.



Nothing Left (feat. Will Heard)

Kygo - Nothing Left (feat. Will Heard) - Single

...



The Party (This Is Ho

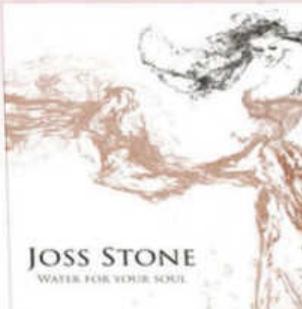
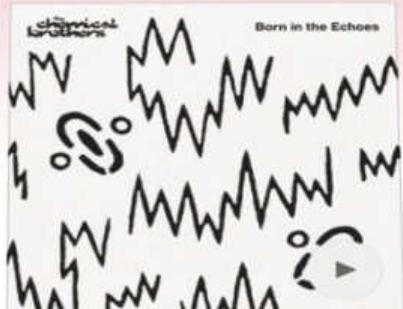
Joe Stone - The Party (

APPLE EDITORS PLAYLISTS
The music we're obsessing over, plus handcrafted playlists.

ACTIVITY PLAYLISTS
The soundtrack to your next move, from working out to chilling out.

What the

NEW MUSIC >



Blood



For You

Marks To Prove It



New

Born in the Echoes

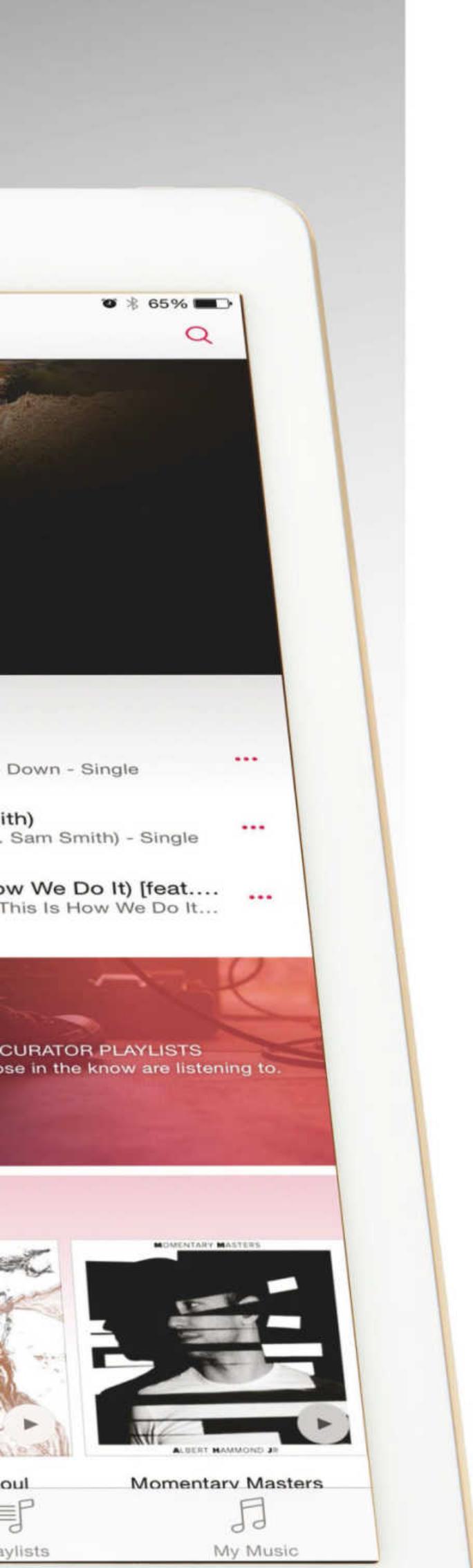


Radio

Water for Your Soul



Connect



THE ULTIMATE iPad HANDBOOK

Core Apps

Your iPad comes packed with Apple power!

- 58 **Read and send email**
Write, read and reply to email messages
- 60 **The Contacts app**
Create the ultimate address book...
- 62 **Using the Calendar app**
Get organised and stay on top of your to-dos
- 64 **Using Reminders**
Never miss an appointment again!
- 66 **Tailor Contacts, Calendar and Reminders**
Improve your productivity with these settings
- 68 **Manage conversations**
Master the features of iOS 9's Messages app
- 71 **Video calls with FaceTime**
FaceTime video calls are much more fun
- 72 **Surf the web with Safari**
View web pages using the iPad's browser
- 75 **Connect to social networks**
Post to popular places from all over iOS
- 76 **Master the Maps app**
Get turn-by-turn directions with Maps
- 78 **Play music on your iPad**
Listen to your favourite tracks with Apple Music
- 84 **Enjoy video on your iPad**
Movies on the move have never been better
- 86 **Buy music and video**
Visit iTunes Store for music, movies and more
- 87 **Built-in utilities**
Your iPad comes with some handy extras
- 88 **Wake up with the alarm clock**
Use your iPad to rouse you from slumber
- 90 **Master Game Center**
Top the Game Center leaderboards
- 92 **Get personalised news**
Find the stories you care about in News

Read and send email

Write, read and reply to email messages using the Mail app



Even in this age of instant updates, Facebook, Twitter and texting, email is still king when it comes to communication, particularly in a business context, or if you've got a fair bit to write. So if you're on the move but need to stay in touch, the ability to read and send email is one of the most important functions your iPad can provide.

These days, many of us have multiple email accounts and receive dozens (if not hundreds) of mail messages every day. Fortunately the iPad makes it easy to manage and handle your email. It supports multiple email accounts and is easy to set up. The Mail app works with all the big names (including Google Mail, Outlook, and Yahoo!) and, of course, it works with Apple's own iCloud mail service.

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9

All the accounts you add feed into a unified Inbox, which enables you to view all your messages in one place without having to check in multiple locations. You can then perform typical email tasks: reply to messages (from the correct account), forward them, flag them, move them to other folders or create a new one.

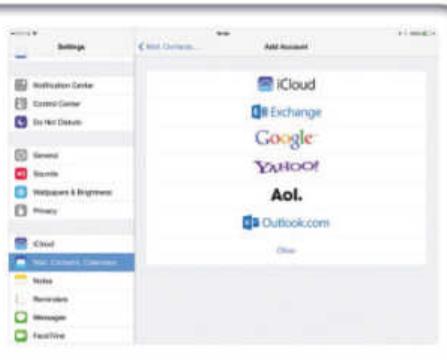
One handy feature in the Mail app is VIP messages. You can mark someone as a VIP by tapping their name at the top of an email. Emails from them are then consolidated in a VIP Inbox (as well as in the regular inbox, where they have a star next to them). If a conversation is important but you don't want participants to be treated as VIPs, you can receive notifications when new messages are received as part of that conversation. Meanwhile, you might choose to be notified about messages from VIPs using unmissable alerts in the middle of the screen.

Naturally, you can style and format your messages, add images or videos to them, save images and videos you receive from Mail to the Photos app, and even print out your emails (should you need to do so) using any AirPrint-compatible printer you have access to (see page 158).

Let's take a look at how it all works on your iPad...

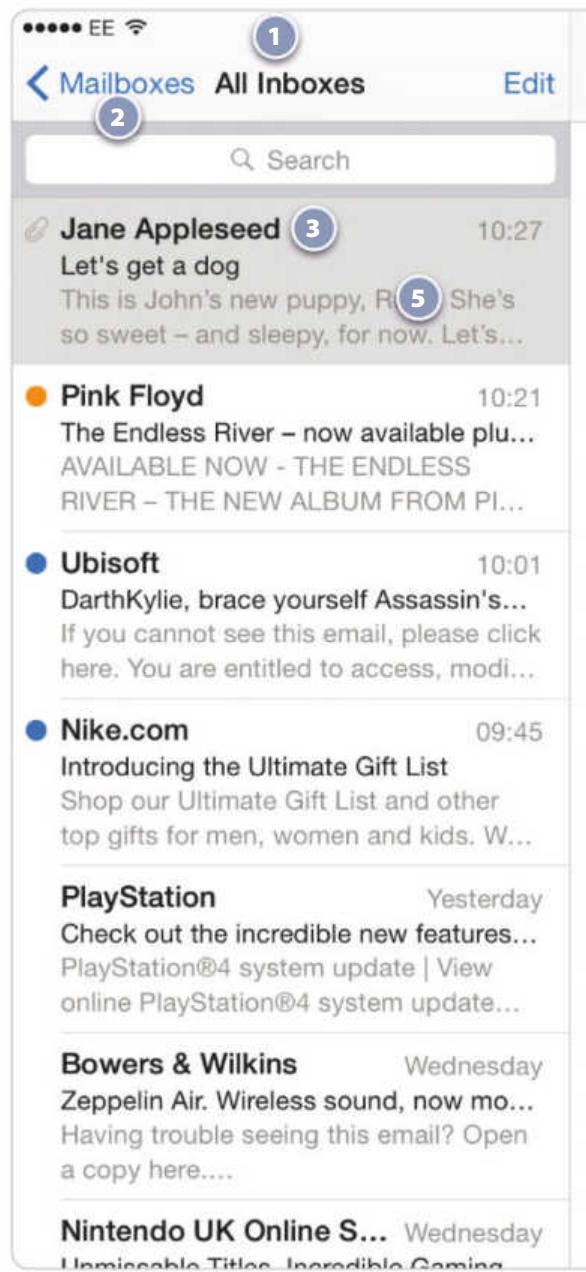
Setting up accounts

To set up a new account, tap **Settings** > **Mail, Contacts, Calendars**, then **Add Account**. Pick the service you want if it's in the list (such as Google) or tap **Other**, then fill in the Name, Email, Password and Description fields. Now tap **Next**, decide which services you want (Mail, Contacts, Calendars and Notes) and finally tap **Save**.



1 Inbox

The left column shows the contents of the current mailbox – the unified inbox, by default. It isn't always visible when the iPad is in portrait orientation; swipe in from the screen's left edge to reveal it. Messages with a double chevron next to their time are part of a conversation, or Thread. Tap one to see the whole conversation.



2 Mailboxes

Tap **Mailboxes** at the top-left to see all of your mailboxes (folders), including the VIP inbox. There you can tap **Edit** to create mailboxes in which to organise messages. You can also switch to an individual account's inbox when you need to focus on it.

3 Messages

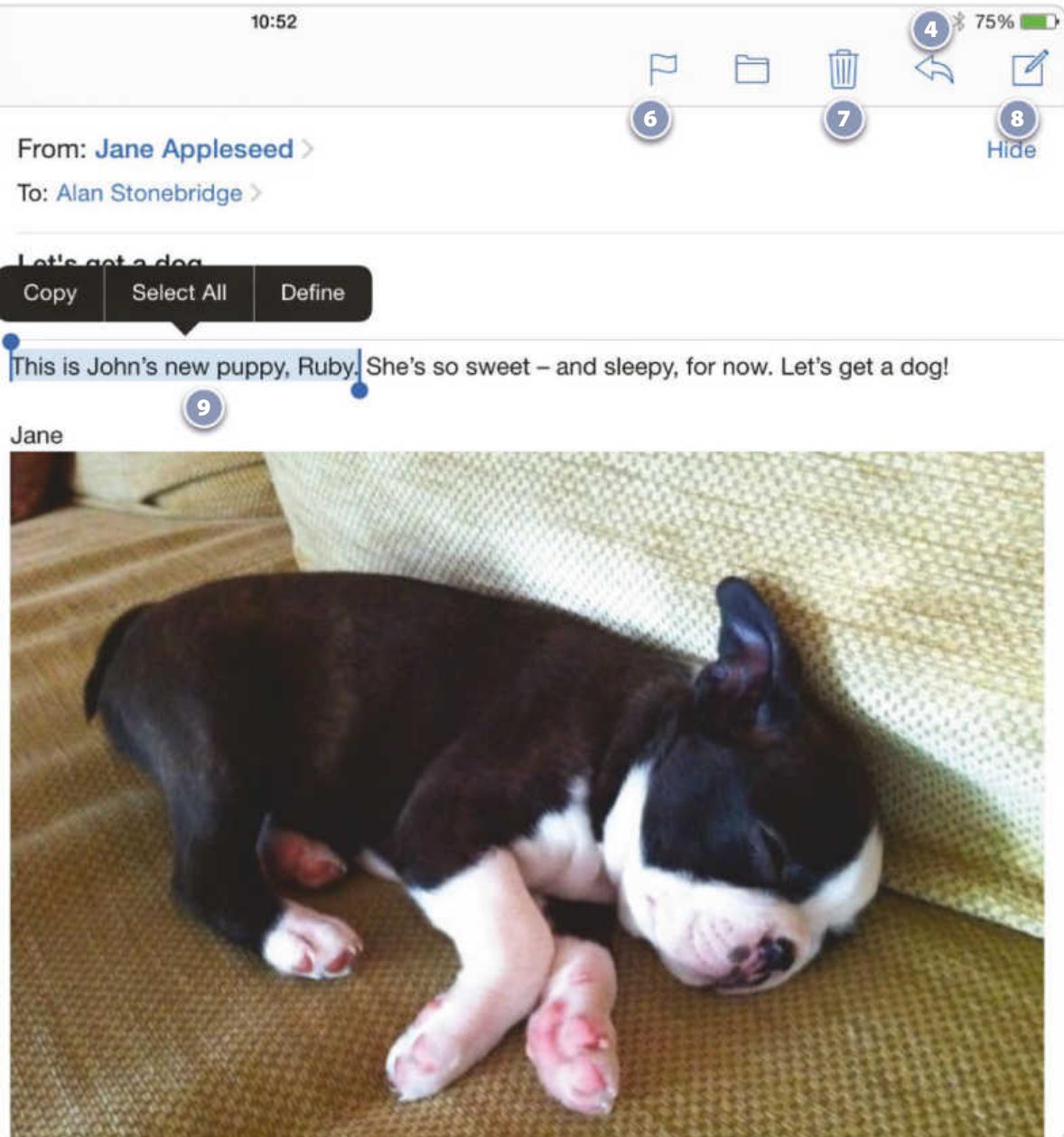
Tap a mailbox to see its contents. Messages you haven't read yet have a blue dot next to them. You can scroll up and down the list of messages and read the two line previews. Tap a message to open it, read it in full, and reply to it. Tap **Edit**, then tap a message if you want to mark, move or archive it. Swipe left or right a short way across an item in the list for shortcuts to deal with it right away. A long swipe to the left removes a message from the list.

4 Reading and replying

Tap the buttons at the top of an open message to flag it, move it to another mailbox, delete it, or reply. Tap the pen-and-paper button to compose a new message. Tap **Cancel** for an option to save a draft. To get it back, hold a finger on the pen and paper. Flick down from 'New Message' to move an in-progress email to the bottom of the screen, so you can refer to other messages, and then tap it to bring it back.

7 Removing messages

To remove a message, tap the trash can. To get it back, tap Mailboxes (top-left), the relevant account (if you've set up more than one), and then Trash. (Tap Edit and turn on All Trash for a consolidated view.) Removing items in Trash deletes them permanently.



5 Navigating Threads

Messages with replies are organised into Threads. Threads are indicated by two small right-facing arrows next to their timestamp in the messages list. Tap such a message to see its whole thread. The top bar will indicate your position in the thread, such as '1 of 2'. Up and down arrows to move between messages appear in the top bar only when the iPad is held in portrait orientation.

8 Replying to messages

Tap the left-pointing arrow to reply, or the pen and paper to write a new message. For a new message, fill in the To and Subject fields. To add a photo, tap in the message's body and choose Insert Photo or Video to select one stored on your iPad.

9 Formatting text

For clearer communication (or just more attractive mails), you can add some basic text formatting. Double-tap your text (or tap once and then tap Select), and drag the blue handles so that the text you want is highlighted. The pop-up includes options such as Cut and Copy; if necessary, tap the little arrow at the side of the pop-up (take care – you need to be pretty precise!) and more options will appear. Among these should be Quote Level, which enables you to increase or decrease the indent of the paragraph. Another option is B/U: tap this, then choose Bold, Italics or Underline. Tap Send (near the top-right) when your message is good to go.

6 Using Flags

You can highlight important emails by attaching flags. To do this, tap the flag icon and choose whether to flag the current message, mark it as unread or mark it as junk. An orange circle appears next to a flagged message; all such messages can be revisited by switching to the Flagged mailbox. The Notify Me item listed when you tap the flag icon turns on notifications about new emails in that thread.

Settings & signatures

By default, your iPad will append the phrase 'Sent from my iPad' to the end of each email. If you want to turn this off or change it to something a little more personal, tap Settings > Mail, Contacts, Calendars and scroll down to Signature. Tap Sent From my iPad and either delete the text or add your own personal message.

If you have several accounts, tap Per Account to reveal separate boxes in which you can set different signatures for each one.

The Mail, Contacts, Calendars settings screen also has a range of other options. It's worth taking time to tailor them to your preferences (see page 66).

Keep in touch with Contacts

Create the ultimate address book and sync it across devices

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9



The Contacts app and associated settings make it easy to access and organise your address books. You can import details from various sources, then find people from any group, quickly create a correctly addressed email, and do much more.

You can add contacts directly on your iPad or sync them over the internet, using various services. If you're using iCloud, you can sync with your computer and iPhone just using your Apple ID.

Contacts can integrate with your list of friends on Facebook, enabling it to be populated with information from that social network, including birthdays and photos of your friends. This means that email addresses or phone numbers that you're missing can be added in automatically by iOS, with barely any effort from you. The Contacts app also syncs with Twitter, pulling through people's Twitter usernames, and again bringing in photos of them.

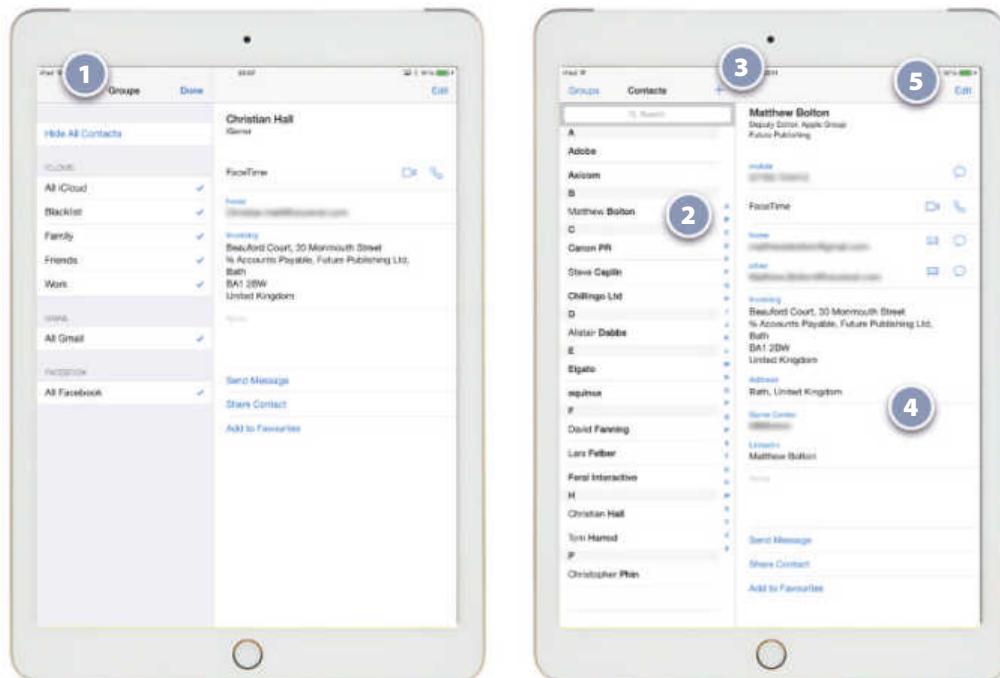
It's possible to sync contacts from a number of online services, including Yahoo and Microsoft Hotmail (now called

Outlook.com) as well as Microsoft Exchange, LDAP or CardDAV accounts: simply link to the account in question by tapping Settings > Mail, Contacts, Calendars > Add Account and then choose the appropriate service. If prompted, make sure you opt to keep your existing iPad contacts. You'll be able to view and search your third-party contact lists, and in some cases – specifically Yahoo and Outlook.com – you can even edit, create and delete entries directly from your iPad and then sync them with your online service.

Also, look out for an option to link entries, allowing you to combine records from different services – say, from iCloud and Facebook – so they're listed as one contact. You can also break apart any that have been incorrectly merged.

The Contacts app integrates with other apps on your iPad, making it quick to accomplish many tasks, including sending emails and messages or initiating a FaceTime call (see step 6 opposite). You can tap an address to view it in Maps. And, if you enter a contact's birthdate, it will appear on your schedule in the Calendars app when you turn on the Birthdays calendar.

VISUAL GUIDE | CONTACTS ON YOUR iPAD



Groups

1 Sign in to icloud.com on your PC or use the Contacts app on your Mac to organise contacts into groups. On your iPad, tap Groups at the top left to temporarily hide some of your contacts by toggling the visibility of certain groups.

All in order

2 Contacts are organised alphabetically – you can type in the search bar to find someone or tap a letter to jump to that part of the alphabet. Contacts can be sorted by first or last name in Settings > Mail, Contacts, Calendars.

Your quick guide to getting around the Contacts app

Edit me

3 Tap the + at the top-right of the list of names to create a new contact from scratch, or the Edit button at the top-right of the person you're viewing to change their details (or to delete that entry). Tap Done when you're finished.

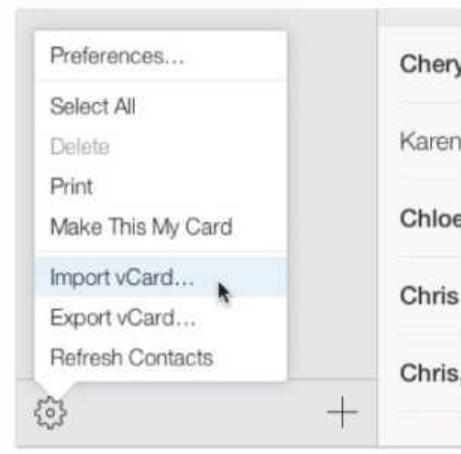
Lots of detail

4 In addition to an address, email and so on, you can add a contact's mobile number and Twitter username, enter your own notes, assign that person a custom ringtone for FaceTime calls, and add anniversary dates.

Linked up

5 When you've imported contacts from multiple sources, it's very common to find duplicate entries, but there's an easy solution – when in Edit mode, scroll down to the Linked Contacts section at the bottom of a contact's record. Here you can combine duplicates into a single record. Tap Link Contacts... then choose the duplicate entry from the list.

HOW TO | KEEP ALL YOUR CONTACTS IN SYNC



1 Get into iCloud

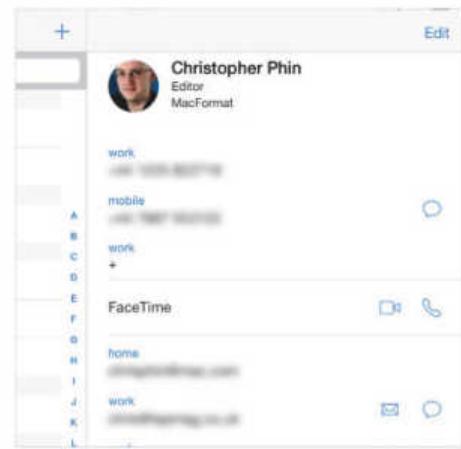
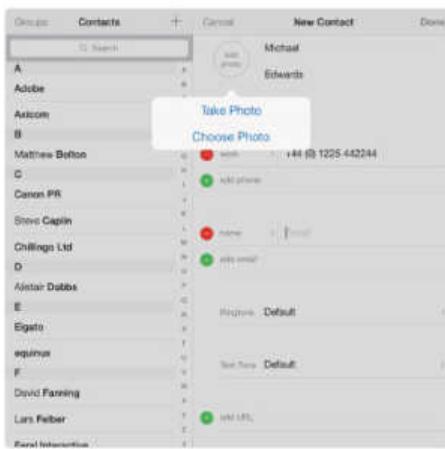
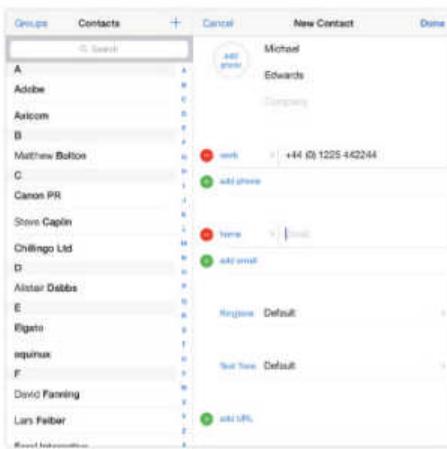
Although you can sync your contacts over a cable to iTunes on your PC or Mac, it's now common and more efficient to sync them wirelessly to all your devices using iCloud. Doing this precludes syncing this data directly with your computer. When you set up your iPad, you would have been prompted to create or sign in with your Apple ID. If you did so, you will already be set for syncing contacts to iCloud, and from there to your iPhone and Mac, if you have them.

2 Other services

iCloud isn't the only option for syncing your contacts over the internet. Go to the Settings app, then tap Mail, Contacts, Calendars. At the top, you'll see your iCloud account, and the option to add a new account beneath. Tap the latter, and you'll see you can sync with many popular online services, including Google, Yahoo, and Microsoft Exchange and Outlook. Choose one, type in your details, and you can pull in your contacts from that service.

3 Import vCard contacts

If you have contacts stored in a service or application that can't easily sync online, you can always manually import your contact list into iCloud, provided you're able to export your contacts as vCards. When you have a vCard file, you can import it into iCloud from any PC or Mac by visiting icloud.com and signing in. Go to Contacts, click the cog in the bottom-left corner, click Import vCard, then select the file. It will sync to your iPad and other devices.



4 Edit a contact

To make changes to a person's entry in the Contacts app, tap their name and then tap the Edit button at the top-right of the screen. Scroll down for many more options, such as to assign the contact a custom ringtone and add the person's birthday. Tap Add field if you want to add something that's not included in the default list – there's lots more available than the fields you can initially see. You can also delete a contact from the bottom of the entry.

5 Add an image

Add a photo to someone's profile and it will be used in the Messages app next to their name. To add one, tap the contact's entry, then Edit and finally Add Photo. You can take a new photo using your iPad, or tap Choose Photo if you already have a picture of them. Select the photo, adjust it to fit and tap Use. Edit the photo by tapping it. Contacts now automatically gets profile pictures from Facebook or Twitter, so you may not have to do anything!

6 Stay in touch

When you tap on a contact, you can see all your options clearly – just tap one to trigger the default action. Usually, though, you'll see little symbols to the right of each class of information. This indicates that there's more than one way to contact someone. Tap a camera or handset to start FaceTime video or voice call, or the speech bubble to send an iMessage. Some of these options will work only if the recipient has an iOS device or a Mac.

Using the Calendar app

Get organised and stay on top of your to-dos with Calendar

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



The iPad's built-in Calendar app is a complete digital assistant that will sync with your online calendar services, keeping you on top of your life no matter where you may be.

Once you link your Facebook account (we'll show you how to do this below) events and birthdays can be synced from that social network to the Calendar app, which means that your business commitments and personal events will all be viewable in the same place. With luck, this should mean that you never have to miss a birthday, a party or an important meeting ever again. In addition, in iOS 9 the Calendar app is more closely linked with Notification Centre (so you never have to arrive late for an appointment either!), and there are more options, in the Settings app,

With Facebook integration, you can call your contacts and email straight from an event on your calendar

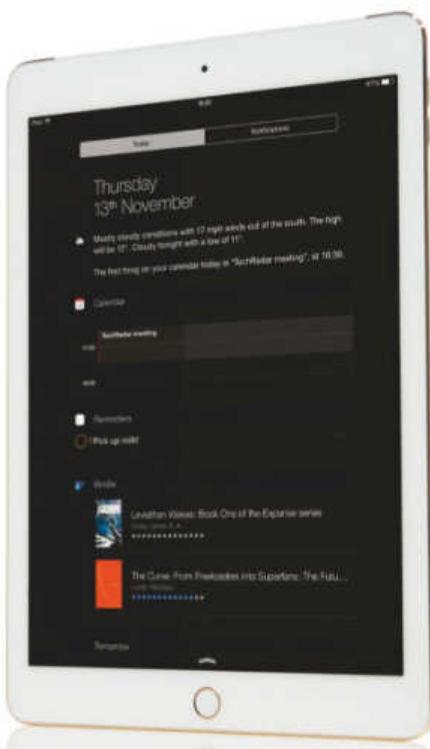
for customising your calendar to ensure privacy and security.

Navigating around the app and creating new events is easy, and with Facebook integration you can call and email people direct from the Calendar app.

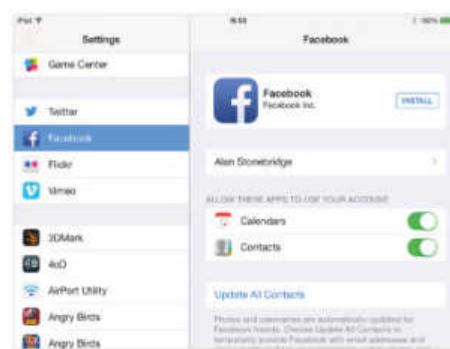
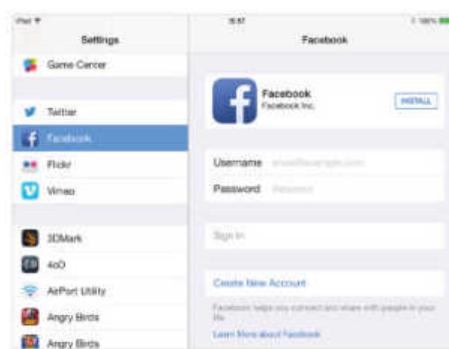
To change your view, simply tap the tabs at the top of the page – Day, Week, Month and Year. You can move between dates by swiping up and down in Month view, or by swiping to the right or left while in Day or Week view.

To add an event, just tap and hold on the time of the day you want, and the Add Event pane will appear so that you can enter the event's details. Alternatively, tap the + at top-right to add an event to any date you like.

You can link your iPad calendar to your iPhone, your Google account, Outlook, Windows Live and many more services. In short, the Calendar app is the most flexible way to organise your life, digital and otherwise.



HOW TO | INTEGRATE FACEBOOK WITH CALENDAR



1 Install Facebook

Tap on Settings > Facebook, enter your Facebook account details and follow the instructions to sign in. If you don't have the Facebook app installed on your iPad yet, tap Install in the top-right corner to download it. You will have to enter your Apple ID.

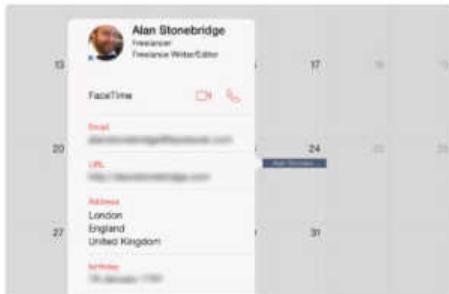
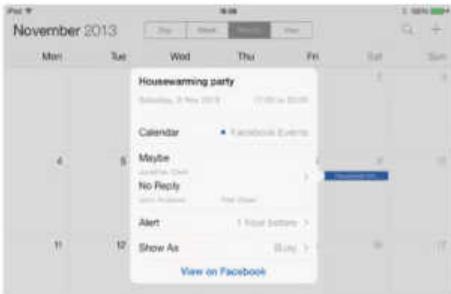
2 Sort your Settings

Once signed in to your account, new options to sync events and friends' details appear. Switch them on, and then tap Update All Contacts to match your iPad's contacts to friends on Facebook by email address and retrieve their profile photos and other details.

3 See your Calendar

Open the Calendar app and tap the word Calendars at the foot of the screen. Scroll down to the Facebook section and you'll see Facebook Events and Birthdays ticked. When such details are added or updated on Facebook, they'll now be synced to the Calendar app on your iPad.

HOW TO | WORK WITH CALENDAR



1 Find events

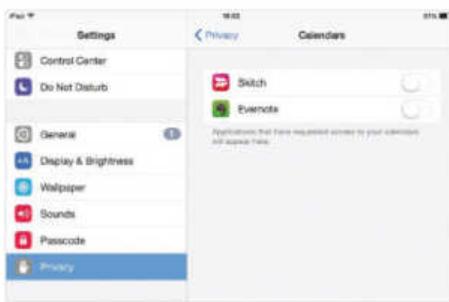
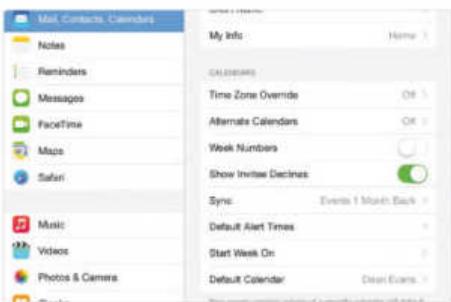
Once you've set up Facebook you'll see that all your contacts are now integrated with your Calendar. In Month view mode, tap on the day to see what's happening, and scroll down to see your events (colour-coded, of course). Swipe left or right to go to a different day.

2 Stay in touch

Here we have an event for someone's birthday. Tap it and a panel will open to show their contact information. Tap on Send Message at the bottom to send them birthday greetings using one of the contact methods they've added to their Facebook profile.

3 Notification Centre

When you pull your notifications down from the top of the screen and tap Today, you'll see the day's events with an indication of start times and durations. (See page 32 to configure Notification Centre.) This is very helpful as an overview of your schedule for the current day.

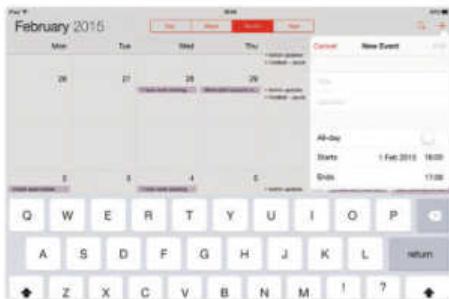


4 Tweak settings

In Settings > Mail, Contacts, Calendars, scroll down to the Calendars heading to pick the default calendar for new events, whether to be alerted to invitations and changes to shared calendars, and to set a default time ahead of any event you create at which to receive an alert.

5 Privacy Settings

In Settings > Privacy you can determine what apps have access to your calendars. Tap the Calendars item to see what apps have requested access to your calendar data so far. You can enable or disable access as you wish by tapping the switch beside each app in the list.



6 On your side

Which way around you hold your iPad makes no real difference to viewing calendars. Swipe to move through the days or months; tap Today (bottom-left) to return to the present. In Day, Week or Month view, you can add an event by tapping and holding briefly.

7 Add an event

You can also add an event by tapping the + in the top-right corner of the screen, without having the event's date in view. The Title field in the New Event box is selected and the keyboard pops up for you to type. To set any detail, tap the value (or switch) to the right of its label.

8 Colour and share

Tap Calendars at the foot of the screen, then Edit to create calendars to organise things, and Done to finish. Tap a calendar's row to toggle the visibility of its events, or tap the i' at right-hand side of a row to set the colour of its events, or to share it with one or more people.

Get alerts with Reminders

Get to grips with digital checklists and never forget the little things

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



The Reminders app is a place for you to make note of things you need to do. That might be a list of tasks you need to complete at home, things you need to buy next time you go to a supermarket, or things that need to be done to complete a project – in fact, you can do all of these things at the same time, without things getting cluttered, because the app enables you to maintain multiple lists.

Naturally, that Reminders is provided as part of iOS gives it a head start in being able to integrate with various other features of your iPad. Although the app looks very simple, don't let that fool you into thinking that it's just a basic tool for jotting down notes (that is, after all, what the Notes app is for). For starters, you can assign a due date to any item, and no matter which list the item is stored in, the app also displays due reminders under Scheduled to help you stay abreast of things without having to dig through each and every one of the lists you've created to check. Once you've completed a task, all you have to do is tap the circle next to it mark it as completed. Such tasks are then hidden



in their list, but they're retained so you can go back and review them, or restore them if you made a mistake. The search bar makes it easy to find the reminder you're after from among dozens or even hundreds of others – but take care: it won't search within notes you've attached to reminders.

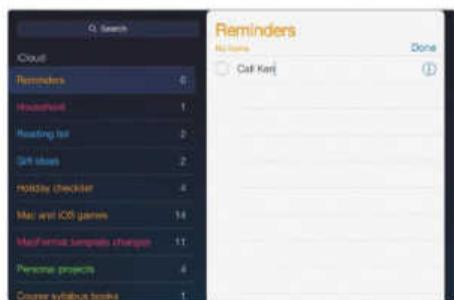
As well as organising items into different lists – perhaps one for work and one for home – you can manually reorder items in a list to reflect whatever importance they have to you. Each list can be given its own colour, and you can share them with other people to work collaboratively or as a family.

Siri and iCloud integration

The app is integrated with Siri, too, which makes it very simple to create reminders just by dictating them. Thanks to the built-in GPS in an iPad with a cellular connection, you can also set reminders to trigger when you arrive or leave a given location. You can even adjust the size of the geofence around a location – that is, set exactly how close you need to be to the precise location in order to trigger the reminder.

Thanks to integration with iCloud, your lists are available on your iPhone, Mac or wherever you can access icloud.com. Your lists, the items in them, any notes you attach to items and other settings are all kept in sync between your devices. It's easy to sync with iCloud: just make sure you've signed in to the service (see page 106) and switched on Reminders in the list of apps that sync data, in Settings > iCloud – you'll need to do this on each device. All the work is then done for you in the background, so the only thing you really need to remember to carry with you is your iPad or your iPhone.

HOW TO | CREATE AND CHECK OFF REMINDERS



1 A new reminder

Creating a new reminder is simple: open the Reminders app, tap in a blank space in the list, and start typing. If you want to use another list, tap its name on the left. Reminders can be a few words or several lines long, and they can contain letters, numbers and special characters.



2 Edit a reminder

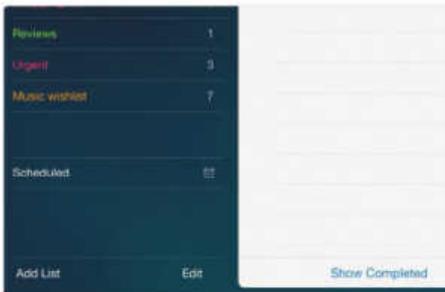
To add details to a reminder, tap the *i* to the right of it; to add them later, tap the item first. You can specify when you'll be reminded, set whether it repeats, and ask to be reminded at a location (on cellular iPads). Add notes, too; if you paste a web address, it will be tappable.



3 Mark as completed

Attended to an item? Simply tap the circle to its left to mark it as completed. It's not deleted, though; tap Show Completed at the foot of the list to see items marked as done. If need be, tap the circle again to mark it as incomplete and restore it to the list.

HOW TO | GET THE MOST OUT OF REMINDERS



1 Search or view by day

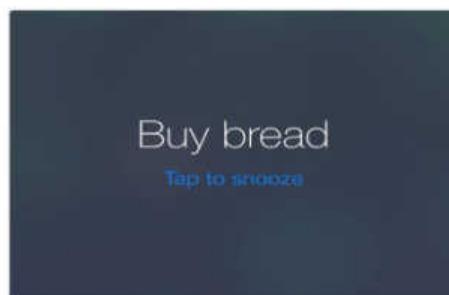
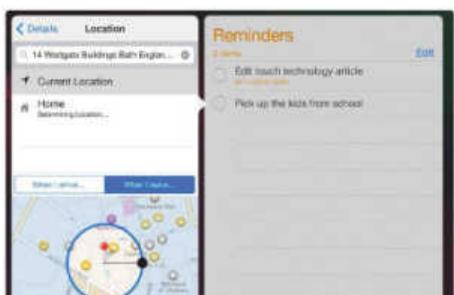
Want to find a reminder? Tap the search bar above your lists on the left, then enter some text from the item you're after (Notes and other details are not searched.) Tap Scheduled (labelled with an alarm clock) under all of your lists to see items scheduled for today.

2 Edit lists

To create a new list, tap Add List at the bottom-left of the screen. To view another list, tap its name. To delete an item, tap Edit at the top-right of the screen, then tap the red icon next to the item. Permanently delete completed items by tapping Show Completed before Edit.

3 Reorder items

To reorder items within a list, tap Edit, tap and hold on the little grab handle to the right of the item you want to move, then drag it up or down the list. You can't reorder completed items even if they're visible. To delete the entire list, tap Delete List at the foot of the screen.



4 Location reminder

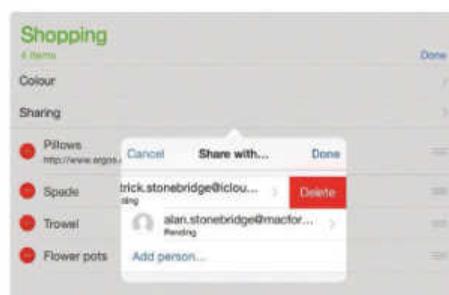
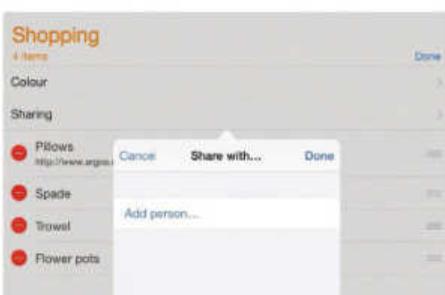
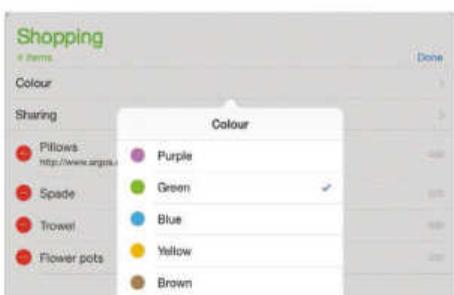
Instead of a time-based reminder, or in tandem with one, you can set reminders to trigger when you arrive somewhere or leave it. Tap an item and then the *i* next to it, enter a location, then drag the circle on the map to set how close to the spot you want to be reminded.

5 Ask Siri

Press and hold the Home button and say, for example, "Remind me to buy bread at 10am". Siri will set the reminder: if it's right, tap Confirm or reply "Yes"; if it's not, tap or say "Cancel". You can also dictate anywhere you'd type: tap the mic key to the left of the spacebar and speak.

6 Set notification style

How reminders appear is controlled by your choices in Settings > Notification Centre (see page 32). Make sure Reminders is in the 'Include' list, and tap its name to change its look. The audio alert that accompanies reminders can be changed in Settings > Sounds.



7 Distinguish your lists

While viewing one of your lists, tap Edit, then Colour to manually assign one of seven to it. Although you can't mix new colours or give them meaningful labels, nonetheless this gives you a chance to come up with a scheme that guides you quickly to whichever list you need.

8 Share a list

Lists can be shared with other people who own Apple devices or have an icloud.com account. Once again tap Edit, then tap Sharing. Next, tap Add Person and enter the Apple ID of someone you want to share the list with. They'll get an invitation by email and in a notification.

9 Manage sharing

Tap Edit then Sharing at any time after sharing a list and you'll be able to see who has accepted their invitation. Anyone can add or delete items, or mark them as complete, but you retain control over the list of contributors; swipe left on a person to stop sharing with them.

Tailor Mail, Contacts, Calendars

Make it easier to stay in touch and organise your day with these settings

SKILL LEVEL

Anyone can do it

IT WILL TAKE

30 minutes

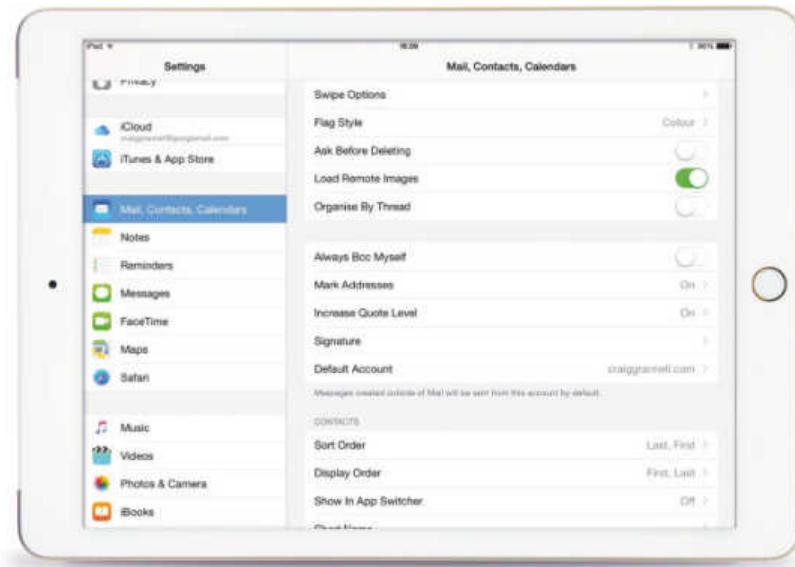
YOU'LL NEED

iPad, iOS 9

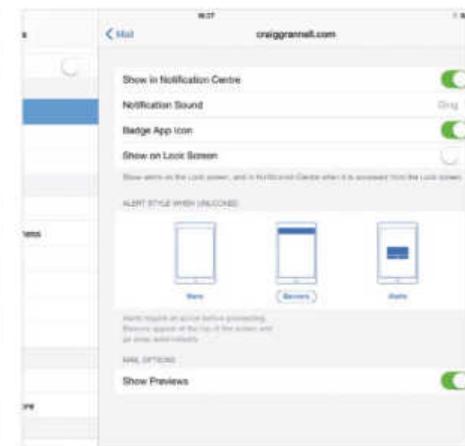
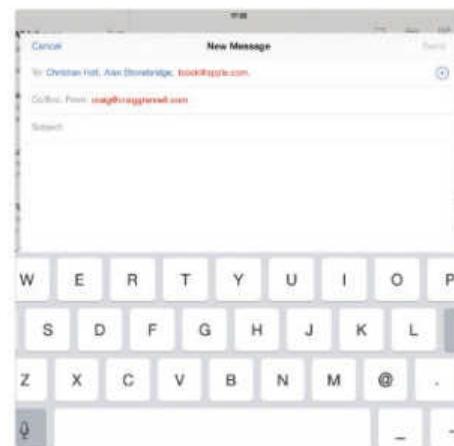
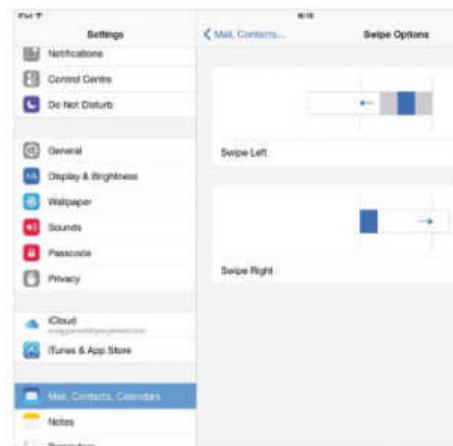


Although the apps on your iPad don't typically provide the same level of options and flexibility you'd expect on a computer, that doesn't mean they are bereft of such things. In the 'Mail, Contacts, Calendars' section of the Settings app, there are plenty of options you can use to adjust the way these three apps work.

Some settings may seem trivial, but they can make a big difference to how you use an app, and also how quickly you can perform certain actions. In these walkthroughs, we explore options there that we think are the most important to your productivity, though we'll also look a little further to show things you might overlook.



HOW TO | FINE-TUNE MAIL



1 Set swipe options

By default in Mail, swipe right on a message and you mark it as read. Swipe all the way left and you delete/archive it, or you can access the More and Flag options by swiping a shorter distance left. You can easily edit these gestures using 'Swipe Options'. Swipe Left can be changed to Mark as Read if Swipe Right is not already using it, for example; while the latter can be changed to Flag or Archive.

2 Mark addresses

This feature is essential if you work in a corporate environment where you'd get thrown to the wolves for accidentally emailing the wrong people. In 'Mark Addresses', you type domains (such as your company's) in a comma-separated list. When composing a message, addresses not matching that list are displayed in red as a warning. Only addresses ending in your specified domains will be in black.

3 Define notifications

We're going to step into a different area within Settings: Notifications. Scroll down to and select Mail. You can choose the maximum number of messages that appear in Notification Center, select an alert sound, toggle whether emails show on the Lock screen, and set the alert style that's used when you unlock your iPad. Switching 'Show Previews' off stops the subject and message body being shown.

HOW TO | ADJUST CONTACTS SETTINGS



1 Sort and display orders

There are two settings in Contacts that determine how names are shown: Sort Order and Display Order. These have the same options: 'Last, First' and 'First, Last'. Sort Order defaults to the former and Display Order to the latter. Swap these round if you like to browse lists by first names, or refer to people by surnames like you're a cop or military.

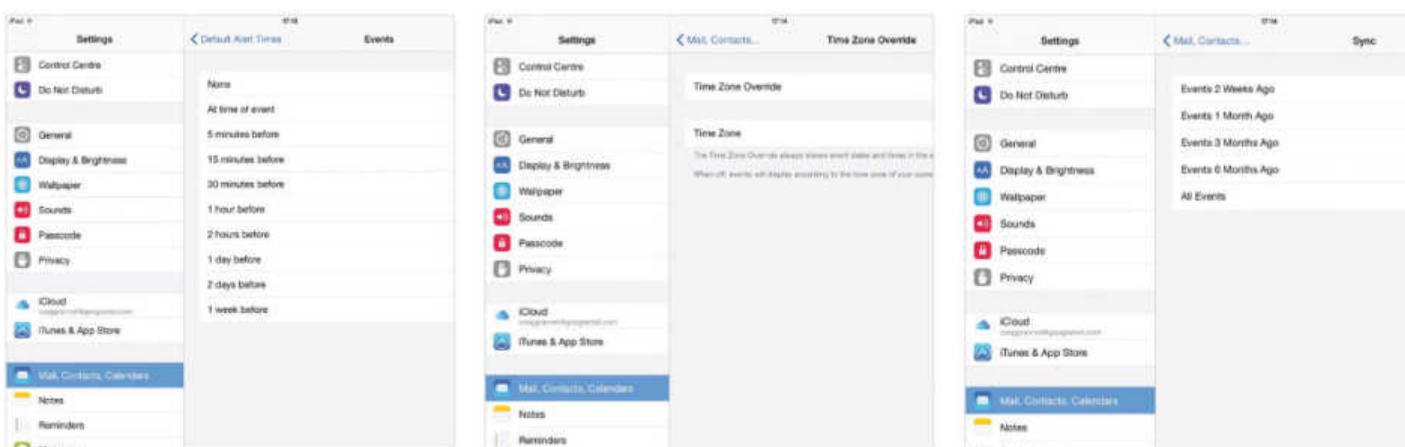
2 Contacts Found in Mail

In the Contacts section, you'll see an on/off slider for an option called Contacts Found in Mail. Since iOS 9, iPads can scan incoming email for contact information like phone numbers and offer to add them to your Contacts app. If you're using the Continuity feature to link to an iPhone, it also lets your iPad attempt to identify an unknown caller if the number's in your emails.

3 Set short names

The 'Short Name' options typically exist for two reasons: when there's not enough space to fit someone's entire name within an app's interface (such as Messages threads, above), and to make your iPad experience a little friendlier. Using the options, you can determine the kind of short name used – first name only, first name and last initial or even their nickname.

HOW TO | CUSTOMISE CALENDAR



1 Define some defaults

In order to speed things up in Calendar, you can set defaults for commonly used options. Under Default Calendar, choose from your existing calendars. This will then be the initial setting for new calendar events – handy if you mostly use a 'work' calendar, but your iPad's been selecting 'home' Default Alert Times define how far in advance you want to be reminded of upcoming birthdays, events, and all-day events.

2 Use time zone support

If you're heading to a different time zone, Calendar gives you the option to automatically adjust the time and date of any 'home' events you've already set. Setting Time Zone Override to On means they'll appear as you originally set them. Setting Time Zone Override to Off will mean they're automatically adjusted to the time and date where you currently are – handy for international calls and virtual appointments.

3 Set up syncing

Under Sync, you can determine how far back Calendar will sync the events that are displayed on your iPad. You get a number of options ranging from Two Weeks Ago to Six Months Ago. If you want to hide most of them, go for the shortest option. To get all the data back on your iPad, choose All Events. If you use iCloud, events will sync in the background. Or if not, the next time you sync your iPad to iTunes.

Manage conversations

Master the features of iOS 9's Messages app

SKILL LEVEL

Anyone can do it

IT WILL TAKE

A few minutes

YOU'LL NEED

iPad, iOS 9, an Apple ID, at least one Contact with an iOS device or a Mac



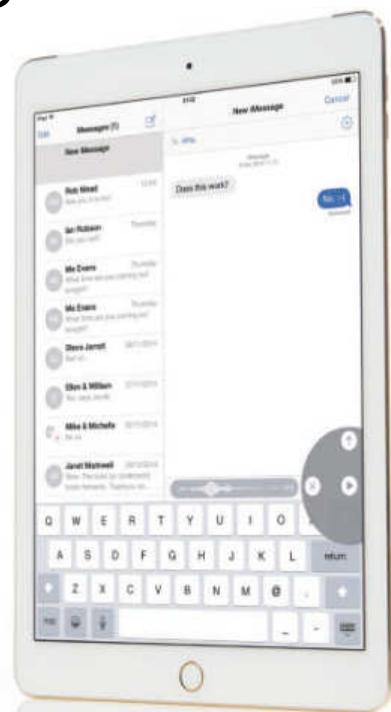
The Messages app is an obvious place from which to send text and multimedia messages, and it's also packed with advanced features for managing conversations. Many of these features are tied into Apple's iMessage system. An iMessage is a type of message that can be sent only between Apple devices, whether they be iPhones, iPads, iPod touches, or Macs – they just need to be online.

Messages saves you resorting to a social network such as Facebook to

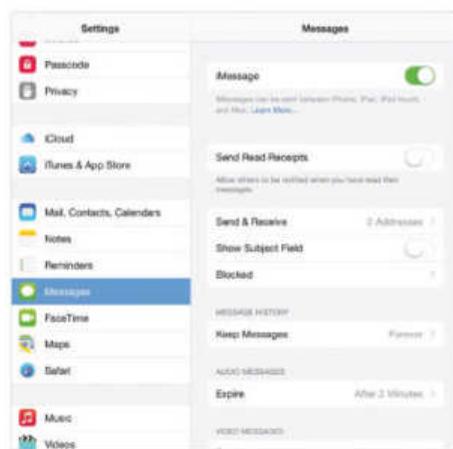
arrange meeting up with a number of people. That's because iMessage allows everyone who has an Apple device to take part in a group conversation so that the details can be agreed upon together. When plans are less definite, you can share your location – either at that point in time, or with live updates for a few hours if you're likely to roam elsewhere.

Messages also gives you control over how intrusive any conversation can get, regardless of whether it takes place by iMessage or SMS, by suppressing notifications about one while allowing another to still grab your attention. Also welcome is the fact that Messages – and the Phone and FaceTime apps, too – can block unwanted contact, whether it's from people you actually know or cold calls from salespeople.

You can stop intrusive conversations by suppressing notifications or blocking unwanted people

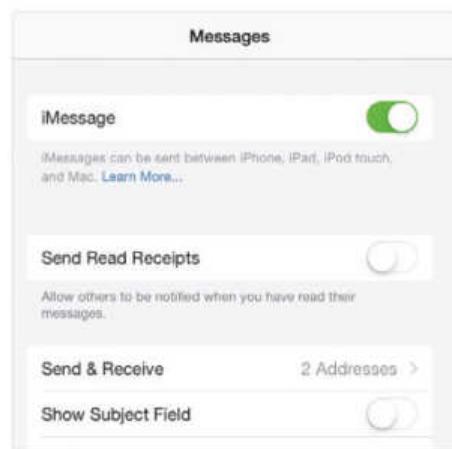


HOW TO | GET STARTED WITH iMESSAGES



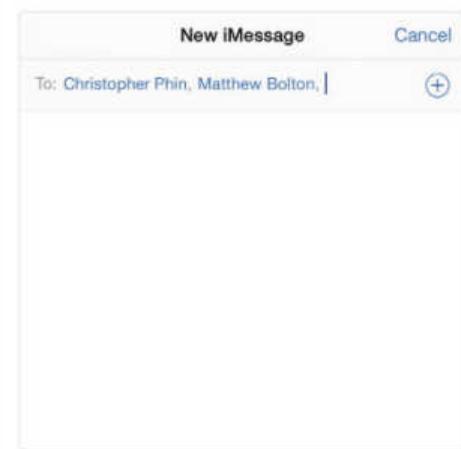
1 Sign in to iMessage

The Messages app is able to send three different kinds of message: iMessage, which is a method available only on Apple devices; and SMS and MMS, which can be relayed to and sent from your iPad if you set up that capability on your iPhone (see page 162). iMessage offers practical benefits as long as all the people you want to reach have Apple devices, of course. In Settings, find and tap Messages, turn on the iMessage switch, and sign in with your Apple ID.



2 Contact options

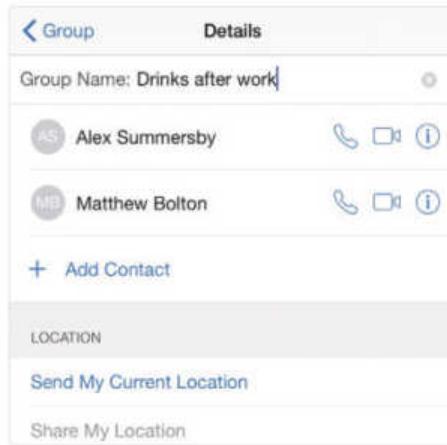
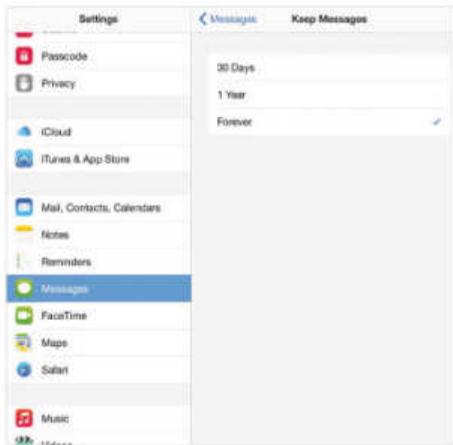
Tap Send & Receive to pick which email addresses linked with your Apple ID can be used by other iOS and Mac users to contact you. Simply tap an address to toggle whether it can be used; those that can have a tick beside them. If you also use an iPhone, your phone number is permanently enabled. Further down this page you can choose whether your phone number or an email address is used to identify you when you send a new iMessage.



3 Write a text message

Open the Messages app and tap the pen and paper icon at the top right to start writing a message. Type the name of someone in your contacts list, or tap the + to select from that list. A message can have multiple recipients, but beware that doing this for an iMessage doesn't just send a copy of the message to each person (like SMS). Instead, it starts a group conversation, and everyone in the conversation receives the other participants' responses by default.

HOW TO | USE ADVANCED iMESSAGE FEATURES



1 Messaging options

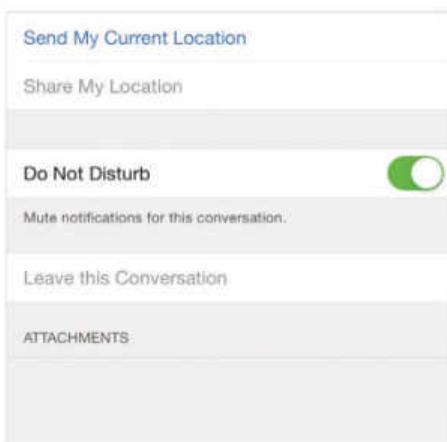
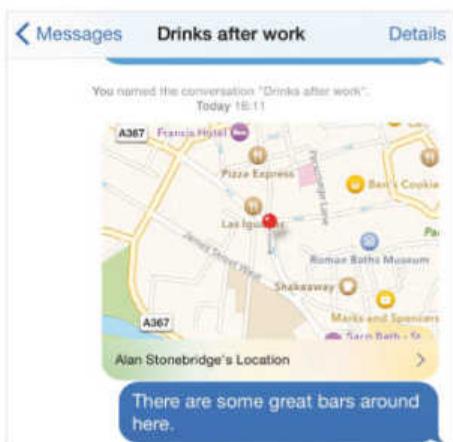
There are various options in Messages, including enabling Read Receipts (see next step), showing the Subject Field of your conversation, as well as dealing with blocked senders. In terms of message management, you can choose how long messages are stored on your iPad before they are deleted – 30 days, a year, or forever. Audio and video messages are set to expire after two minutes by default. Change this via Settings > Messages.

2 Read receipts

After sending an iMessage, 'Delivered' should appear below the message's bubble to confirm receipt. If the recipient has read receipts enabled, that will eventually change to 'Read', with the time at which they did so. If you don't want your iPad to send read receipts, turn off Messages > Send Read Receipts in the Settings app. Dates appear between message bubbles. To see the time messages were sent, swipe from right to left and keep your finger on the screen.

3 Group messaging

Group conversations are listed by their participants' names, but you can assign a more meaningful label. Tap Details at the top right of the conversation, and then swipe downwards to reveal a field above the list of participants, into which you can type a label, such as 'Reunion'. Swipe from right to left on a participant's name to reveal a Delete button; tap this to stop them receiving your contributions. Tap Add Contact to add more people to the conversation.



4 Share your location

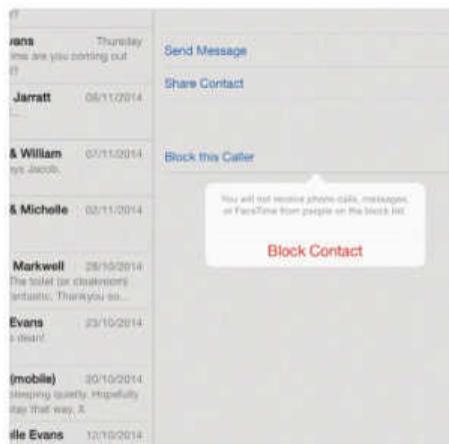
When meeting someone, tap Details and look under the Location heading. You can share your current location if you'll be there for a while or share your live location for a period of time – an hour, until the end of the day, or indefinitely. When you receive a location, tap the map to view it full screen. Choose walking or driving directions and tap Start, or tap Apps to find navigation apps that will help get you there by, say, public transport based on where you are.

5 Mute a conversation

Notifications from chatty conversations can become a distraction when you're busy. Tap Details at the top-right of the conversation and turn on the Do Not Disturb switch on this page. This doesn't turn on Do Not Disturb for everything on your iPad, as the switch of that name in Control Centre does – it mutes only this conversation. You'll still receive messages so you can catch up on the discussion later, and at any time you can turn this switch off again.

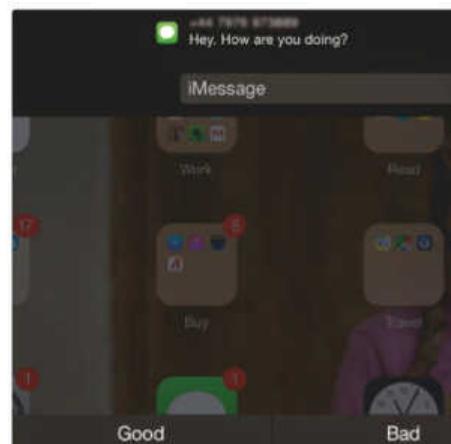
In iOS 8 and OS X Yosemite Apple introduced Continuity features, one of which is the ability to make and receive SMS and MMS messages and phone calls using Macs and iPads. It does this by relaying them through your iPhone. All devices – including your iPhone – need to be connected to the same Wi-Fi network, and signed in to the same iCloud account. In Contacts on your iPad, open a person's contact card and tap the speech balloon or phone icon next to their number. The former takes you to Messages to send either an SMS or an MMS. The latter immediately calls the person from your iPad. Both kinds of communication are relayed over the Wi-Fi network to your iPhone.

HOW TO | USE ADVANCED iMESSAGE FEATURES (CONTINUED)



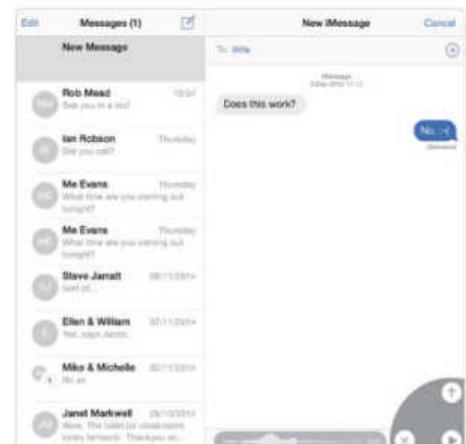
6 Block senders

A sender of unwanted messages can be blocked by tapping Details, the 'i' symbol next to their name, and then Block this Caller. This also prevents contact through FaceTime. You can review who is currently blocked under Settings > Messages > Blocked. You can pre-emptively block people there, too, if they're among your contacts. In the Contacts app (see page 60), add the pest to a Blocked group and tap Groups to hide it so that only valued people are shown.



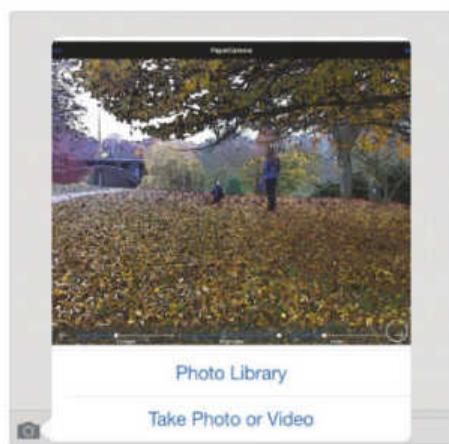
7 Reply quickly

When you get a notification of a new message, you don't need to stop what you're doing and open up the Messages app. Since iOS 8 the option to reply directly from a notification has been added – at the Lock screen, swipe left on the message and tap Reply, or pull down on the notification at the top of the screen if you're already using your iPad. Either way, you can quickly type a reply and send it without having to quit what you're doing or unlock your iPad.



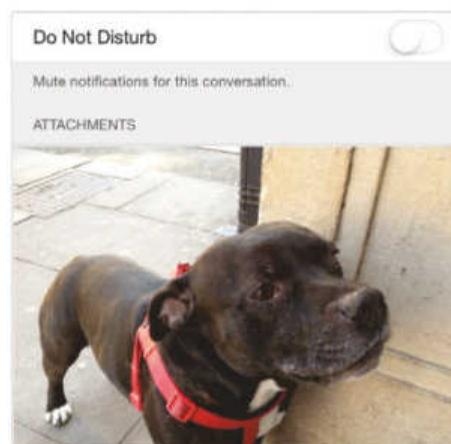
8 Audio option

Tap and hold the microphone button to the right of the field into which you would type an iMessage. The app will record as soon as – and for as long as – you hold your finger on that button. When done, slide your finger upwards onto the arrow to send the soundbite, or slide it left onto the cross to delete the soundbite. To listen to the soundbite before making this decision, lift your finger and then tap the play button that appears where your finger was.



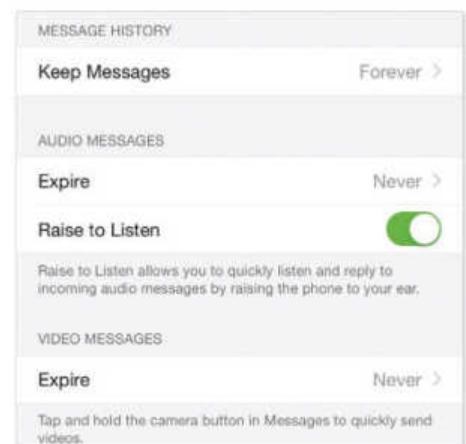
9 Send a photo or video

Tap the camera icon on the left of the message bar to attach a photo or video to your text. There are two options here. The first is to add an existing photo or video from your Photo Library – tap Photo Library, scroll through your media until you find the one you want, then tap Use. The second option is to select Take Photo or Video. This will launch the Camera app. Take a photo or video by pressing the shutter button and then tap Use Photo or Use Video.



10 Review attachments

Tap Details in a conversation and then scroll down to see photos, videos, soundbites and other attachments sent and received. Tap and hold one for actions: attachments can be copied and pasted between conversations, or deleted. Tap More to mark several attachments to save or delete. In Settings > Messages there are two items labelled 'Expire', which can be set to remove audio and video attachments after two minutes (the default) or never.



11 Set expiry dates

The text in iMessages doesn't take up much storage space, but you may want to have them deleted automatically after a period of time so that you don't have to manage them yourself. Go to Messages' settings and tap Keep Messages. The options available are to keep messages for 30 days, one year, or forever. If you choose either of the first two options, you'll be forced to delete messages that are already older than that right away.

Video calls with FaceTime

Who needs phone calls when video conferencing comes built-in?

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

A contact with an iOS device or a Mac which has a front-facing camera



Getting started with FaceTime is easy. Open the Contacts app, tap a contact's name, then tap either the video or audio icon next to 'FaceTime' on their details page. If your contact has a compatible device, it will ring, informing them that you're calling. When they answer, away you go!

The information that's stored in the Contacts app is directly accessible from within the FaceTime app as well. Open FaceTime and you'll see a list of people you've called recently in a column on the left-hand side of the display. To access your contacts, tap the + at the top-right of that panel, and then scroll through the list to find someone, tap

their name and choose a method by which to try establishing a FaceTime call.

At the top of the list of recent calls, you can switch between seeing only recent video or audio calls by tapping the relevant option. You can also type in a name, email address or phone number to search your contacts from here.

You can switch FaceTime on and off in Settings > FaceTime. If you don't switch it off, you'll always be available for FaceTime chat (unless you configure Settings > Do Not Disturb) – and you can tap Blocked and specify people who will never be allowed to reach you by text message or a FaceTime call.

In the same place in Settings, you can change the email address that people

use to contact you over FaceTime, or add another address that acts like a phone number you can give out, or add several to give to different groups.

There are a couple of things to note. As well as using Wi-Fi, FaceTime can also work over a mobile network if your iPad has that capability. But watch your data allowance – video eats it up. If you prefer, you can switch this off in Settings > Mobile Data – under 'Use Mobile Data For', turn off the switch for FaceTime.

Second, the person you want to contact over FaceTime must also have an iOS device or a Mac with a front-facing camera. To chat with people who don't have either of these, use an app like Skype (free from the App Store).

VISUAL GUIDE | FACETIME'S IN-CALL CONTROLS

Thumbnail live view

1 You'll see a mini preview of yourself showing what the other person sees. Tap and drag the preview to reposition it.

Camera switching

2 Tap the camera icon to switch between the FaceTime camera (front-facing) and the iSight camera (back) while you chat.

Designated contact

3 Tap the red button to end a call. To call a contact, you need to ensure you have the number or email address they've registered for FaceTime – in your contacts list, or, for a phone number, type it into FaceTime's search bar and then tap the phone icon that appears.

Mute the microphone

4 Tap the rightmost icon at the foot of the screen to mute the microphone. The microphone's audio level isn't adjustable, but you can alter the speaker volume for received audio using your iPad's usual volume controls.

Suspend camera

5 If you press your iPad's Home button while chatting, you'll be able to carry on using FaceTime but also access other apps. The camera will be switched off but it will still be possible to chat. To return to the video, tap the green bar at the top of the screen.



Browse the web with Safari

Learn how to use the iPad's easy-to-use yet capable web browser



The iPad is a fantastic tool for browsing the web. Its large, high-resolution display makes pages look incredible, and being able to pan around and zoom into pages and open links with your fingers makes for the best web browsing experience available. iOS 9 includes a sleek new version of Apple's Safari web browser that's easier and more fun to use than ever before.

Instead of separate address and search fields, there's now a unified 'Smart Search Field' at the top of the browser. This is a powerful new way to find resources on the web,

from specific pages by address to telling a search engine what you want, searching your personal bookmarks and items in your browsing history, and even looking for words on a page. If you're looking for something then the Smart Search Field will deliver it.

Safari now also boasts a comprehensive set of features that go way beyond most web browsers. As well as being able

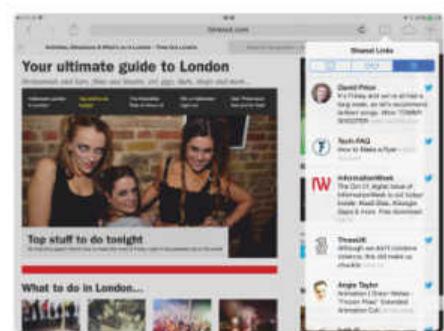
to bookmark pages, you can add them to your Home screen (where they appear as app icons). You can also add pages to your Reading List, which is a place to store articles you perhaps don't have time to read right away but don't want to bookmark permanently, and its contents are synced to devices signed into your iCloud account.

You can also strip out unwanted web ads, banners and other distractions from a page using the built-in Safari Reader; and Safari integrates with your social media accounts so you can share to Facebook and Twitter to your heart's content. Shared Links lists, right inside Safari, pages shared on social networks by your friends.

In short, Safari on iOS 9 provides the best web experience we've ever known. Let's see how it all works...

Shared Links

Shared Links is one of the neatest new features in Safari. It shows links that have been shared by other people using social media accounts (mostly Twitter). First ensure that you are signed in to Twitter: tap on Settings > Twitter then enter your username and password and tap Sign In. Go back to Safari and tap on the Bookmarks icon in its toolbar. Tap the Shared Links tab (the one that shows an '@' symbol) to view things that have been shared on Twitter. Tap any link and that page will open.



Use the Shared Links feature to quickly see what pages your friends are sharing on Twitter and LinkedIn.

1

The Smart Search Field

At the top of Safari sits the efficient new unified Smart Search Field. Tap it and the keyboard appears, enabling you to enter web addresses or search terms. Enter an address, such as www.bbc.co.uk/news, or a search term such as 'BBC news' and tap Go. By default, Safari submits search terms to Google's search engine, but you can switch to using another in Settings > Safari > Search Engine.



Facebook hails 'strong hit 1.49 billion

1 hour ago | Business



2

Navigating web pages

Swipe your finger up and down the screen to scroll through a web page. Use the pinch-to-zoom gesture to zoom in on text and images, or double-tap a part of the screen to intelligently zoom to that element. Just tap on links to open them, and swipe in from the left or right edge of the screen to go back or forward a page at a time, respectively. Hold a finger on a link for handy options such as Open in New Tab or Add to Reading List.

3

Saving images

You can save an image by holding a finger on it until a contextual menu appears. Now choose Save Image and it'll be sent to the Photos app. Go there and you'll find the picture in the Photos tab. You can use the image as your iPad's wallpaper, or share it on Facebook, Twitter or Flickr by tapping Share, or send it by other methods that appear in iOS's share sheet – including AirDrop to your Mac or iPhone.



7 A clearer way to read a page

Safari Reader is a great way to view lengthy articles without distractions such as flashing adverts. It strips down a page to just its main text and the images that belong with it. To view a page this way, tap the icon that shows four horizontal lines, at the left-hand side of the Smart Search field. Tap it again to see the page as normal.

4 Adding bookmarks

To bookmark a page, tap the Share button in the toolbar (an arrow emerging from a square) and choose Add Bookmark. By default, bookmarks are added to Favourites (tap Location to change this). Tap Save to bookmark the page. Access your bookmarks by tapping the icon that looks like an open book, then the leftmost tab. Just tap a bookmark to open it. Tap Edit to add new folders to organise your bookmarks or to remove items.

5 Finding text on a page

One neat trick that some people overlook is that you can search through the text of a page using the Smart Search Field. Enter a word and look for On This Page at the bottom of the results; below that heading, tap the option that finds your word and Safari will highlight in yellow all instances of it on the page. Step through them using the arrows in the bottom-left corner of the screen, and modify your search term at the bottom-right.



6 Set up a reading list

Reading List is a great way to keep track of articles that you want to read at a later date. Tap Share and then Add to Reading List to add the current page to it. Tap the open book icon and then the Reading List icon (which looks like a pair of glasses). As you tap items in the list they disappear from it; switch between seeing all items and only unread ones using the control at the bottom-right of the list.

iCloud Tabs and AirDrop

You can share pages seamlessly with other people using the AirDrop feature in iOS 9. Slide your finger up from the bottom of the screen to reveal Control Centre and tap AirDrop and then Everyone (you can choose Contacts Only to be more selective). Now tap Safari's Share button and anyone nearby with AirDrop enabled will appear in top row of the share sheet. Tap a person and they'll be asked if they want to receive a link from you. Also, you can use iCloud Tabs to view pages you've left open on other devices signed into your iCloud account. Tap the icon that shows two overlapping rectangles (top-right) and scroll down to see them.

HELPING YOU
MAKE THE MOST
OF LIFE IN TODAY'S
CONNECTED WORLD



ONLINE • PRINT • TABLET

AUDIO TECHNICA
ATH-MSR7

Escape to a world of
high resolution audio

SAMSUNG JS9000

Relax with the latest
home entertainment

CARL ZEISS VR

Embrace a new era of
virtual reality gaming

SONY XPERIA Z3

Putting you in control
of your life and home

APPLE WATCH

Your health and
fitness upgraded

LIFE'S BETTER WITH T3

Connect to social networks

Post to the most popular networks even without installing any apps

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

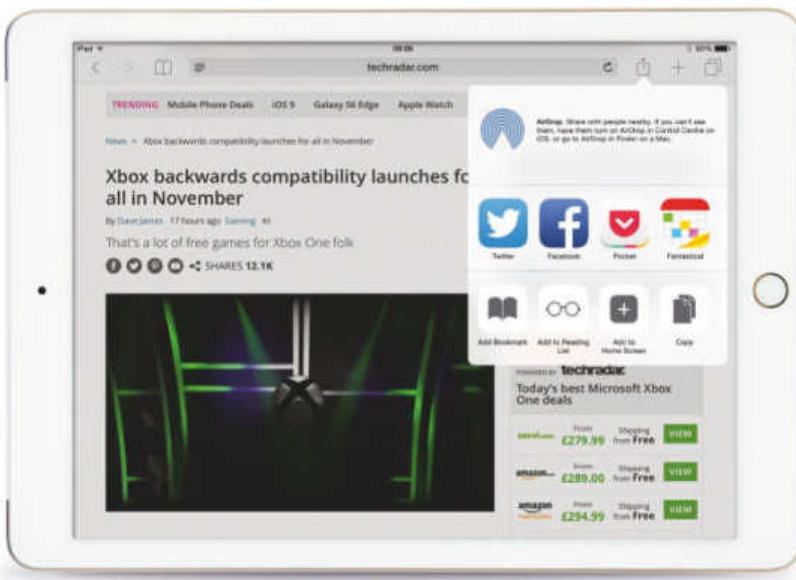
iPad, iOS 9, an account for Facebook, Twitter, Flickr or Vimeo



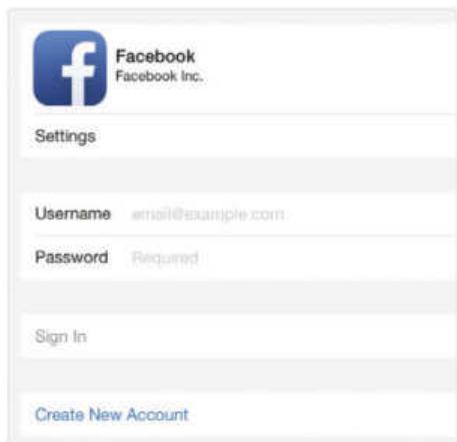
Look down the list of categories in the Settings app and you'll find one that contains Facebook,

Twitter, Flickr and Vimeo. This enables you to sign into each of these networks in just one place, and then post whatever it is you're viewing in many apps (built-in and third-party) to the appropriate networks. Just tap the commonly-used Share icon (or, on occasion, the word 'Share') to do so.

Signing in to Facebook is also a way to quickly fill in missing details in the Contacts app (at least, those which friends publish to that network). If the app doesn't manage to match people's identities on Facebook with your existing contacts, the Contacts app provides a means to link their cards, so you don't end up being confused by duplicate entries (see page 60).



HOW TO | SIGN INTO FACEBOOK AND UPDATE CONTACTS



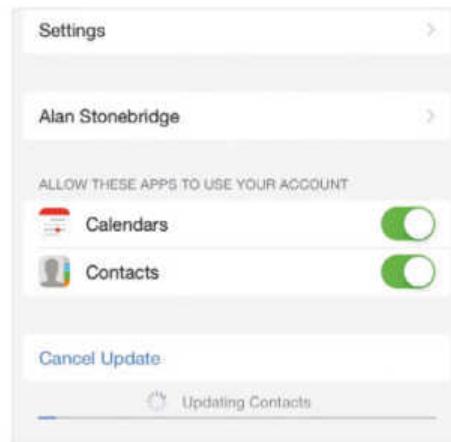
1 Sign in

Signing in to any of the four networks is similar, but we'll demonstrate with Facebook because of its huge popularity. Open Settings and scroll down to the seventh group on the left, which lists networks that iOS can connect to without an app. Tap Facebook, then either tap Create New Account, or enter the email address and password you use to sign in to Facebook using a web browser, then tap Sign In.



2 Review privacy details

You'll be informed about the benefits of signing in and what calendar and contacts data will be downloaded from Facebook. Note that apps have to ask permissions to use your Facebook account and the basic profile information they're allowed to access; at any time, return to Settings > Facebook to disable an app from future access, but bear in mind that this information might already have been used.



3 Update your contacts

Tap Sign In to go back to Facebook's settings. You'll see a list of apps that can connect to your account – the built-in Contacts and Calendars apps for now. Switch these off if, say, you don't want Facebook events to be shown on a dedicated calendar. Tap Update All Contacts to send some details to Facebook; this matches friends to your contacts list and then fleshes out the latter with missing details.

Master the Maps app

Find nearby attractions and get turn-by-turn directions with Maps

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



Before iOS 6, the iPad got its maps from Google by default – but then Apple ditched its rival in favour of its own service, which got off to a shaky start (thanks to some initially inaccurate data and some wonky 3D). However, since then it has steadily improved and now offers some useful features, notably satnav-style turn-by-turn navigation. You still don't get the Street View feature which is part of Google Maps, but if you want it, you can simply install Google's own app – it's a totally free download from the App Store.

Here we'll look at the main features of Apple's Maps app. One thing to note is that the search functionality is less helpful than that of Google Maps, meaning that you may well have to give

it a bit more information when you're looking for a place: 'Pickwick Lodge Farm B&B' might not be enough, for example; you might have to add a street, town and/or postcode to help it along. It won't even default to the country you're currently in, so if you're searching for Hyde Park, say, it's likely to give you every other place with a similar name in the US before it manages to locate 'Hyde Park, London, UK'.

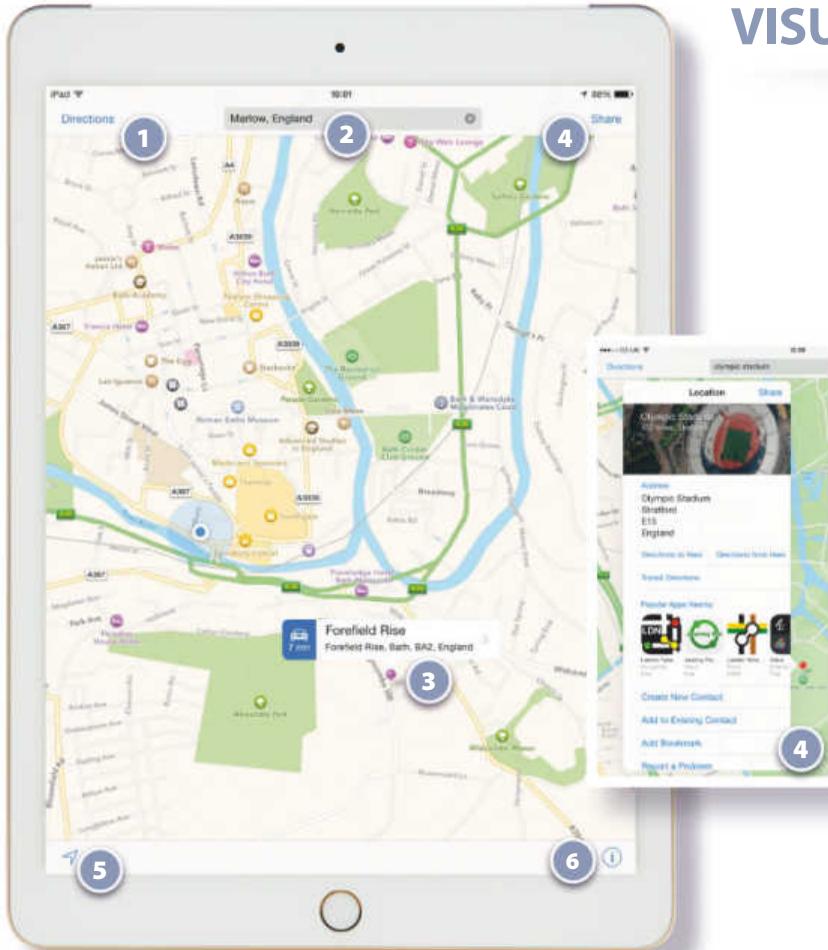
The other thing to bear in mind is that not all the location markers for points of interest are exactly in the right place (though this problem isn't unique to Apple's maps), so the best way to find out where something is located is always to use its postcode.

Maps will store some recently viewed maps on your iPad, but it ideally needs

to be connected to the internet – else it won't work when you try to look at an area you haven't viewed before.

Free satnav

Turn-by-turn navigation is a great feature, but even an iPad mini is a little large to mount on the windscreen of your car. Your iPad will speak directions to you, though, so you shouldn't need to take your eyes off the road to stick to the route. Better still, if your car has Bluetooth built in, you can connect your iPad to this and have the directions spoken through your car's speakers. Note also that your location will be continually tracked using the GPS sensor in Wi-Fi + Cellular iPads, thus draining the battery faster than normal, so an in-car charger is a must.



VISUAL GUIDE | THE MAPS APP

Directions

1 Tap Directions at the top-left to get turn-by-turn guidance to your destination. We'll show you how to use this satnav-style feature on the facing page.

Search

2 Tap the search bar and type in an address, postcode or attraction name, then tap Search to find it. Remember, you'll need to be pretty specific.

Dropped pin

3 Drop a pin by tapping and holding a spot on the map. Then tap the pin to find out more about that location, including a full address and directions to or from it. You can also share the location with your contacts or add it to a new or an existing contact.

Share

4 Tap Share to send your current location to someone, either by email or by text message. There are also options here to add the location to Favourites (accessed by tapping the search bar), or to send the map to an AirPrint-compatible printer (see page 158).

Current location

5 Tap the arrow at the bottom-left to centre the map on your current location, marked with a blue dot. Tap it again and the map will rotate to reflect the direction you're facing.

More options

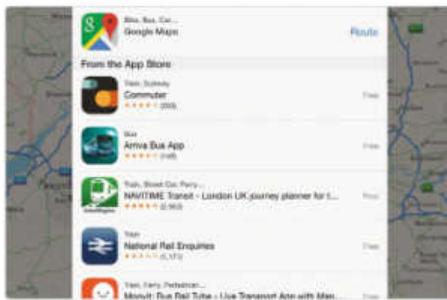
6 Even better, tap the icon at the bottom-right for additional options, including overlaying traffic information, a 3D view, and to switch between Standard, Hybrid and Satellite views of the map.

HOW TO | USE TURN-BY-TURN DIRECTIONS



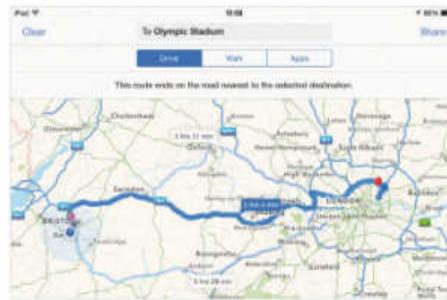
1 Where to?

Tap Directions at the top-left. The default route is from your current location to any pin you've dropped. To change this, tap the Start or End box and type the street name, postcode or contact name where you'd like to begin or end, or tap one of your recent trips listed below.



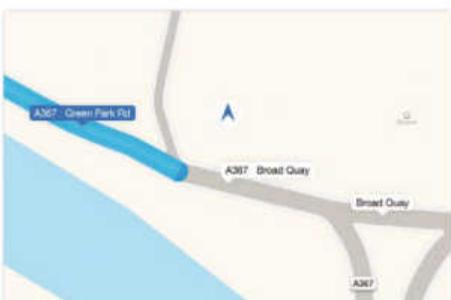
2 Mode of transport

As you type, suggestions will appear below; tap one of these at any time to select it. Tap the double-arrow icon to swap your chosen start and end points. The default method of travel is driving, but you can also get walking directions or find transit apps for your area.



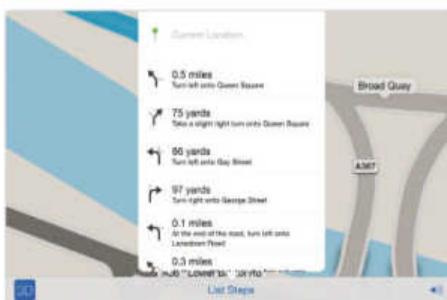
3 Pick your route

If there are multiple routes available to your destination, these will be shown more faintly on the map. Tap each one to see how long that route will take and how far it is. You may see alerts or more information at the top, too. Happy with the route? Tap Start.



4 Off you go!

The map will zoom down to a schematic view, showing your location, the road name and directions for the current leg, with times. By default Siri will speak the directions for you. You can pinch to zoom out of the map or swipe to rotate the view if you wish to.



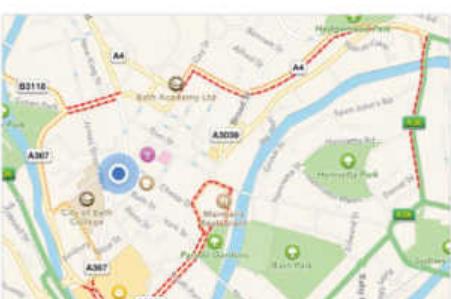
5 Overview and options

Tap the map at any time for options. Tap List Steps in the middle at the foot of the screen for the full set of directions in text form. Tap the speaker icon at bottom-right to turn off the voice or adjust its volume. Tap Overview at top-right to zoom out and see the whole route.



6 Get a better view

At the overview, you can tap the *i* icon at bottom-right and switch to satellite or hybrid view, pinch to zoom, and twirl two fingers to rotate the view – a little compass at top-right will help you keep orientated. The other really useful option in the menu is Show Traffic.



7 Traffic information

When you ask Maps to show traffic, you'll see lines along congested roads: red (severe) or orange (less severe). You'll also see sets of roadworks marked as little orange icons. When you tap Resume, all these handy options vanish and you return to the plain map view.



8 Changing a journey

To stop turn-by-turn navigation or to alter your route – for example, to avoid a traffic jam – tap End, then start again from step 1. You can still use other apps during a journey; the status bar will turn blue and you can tap it to jump straight back to your current leg.

3D FLYOVER TOURS



The Maps app includes 3D Flyover tours. Whenever you search for a city, it will tell you if this virtual sightseeing guide is available. Not all cities are supported, but try out London, New York, San Francisco, Paris, Rome, Cape Town and Madrid.

Complete guide to Apple Music

Apple's music streaming service brings big new features to its Music & iTunes apps. Make the most of them...



Apple has at last introduced a music streaming service that, for a monthly fee comparable to similar services such as Spotify, gives you access to millions of songs by artists big and small. For £9.99 a month, or £14.99 to allow up to five other family members to use it too, you can explore hundreds of years of musical heritage and hear brand-new releases on your iPad, iPhone, Mac, Windows PC and Apple Watch – and more recently from your Apple TV, with Android devices to follow suit.

We've focussed the majority of our tips on the iPad and iPhone versions (which are almost identical) because of the popularity of accessing music

listen to – both new releases and back catalogue material that fits your tastes. Apple Music tries to do this intelligently, based on some simple guidance from you when setting it up, explicit feedback you give it by marking things as 'loved', and your listening habits.

Apple Music also connects you to your favourite artists in the same way you might follow them on social networks. This doesn't require a subscription except to add audio from their posts to your library.

You might already follow artists on other networks, and right now many we've followed seem not to be posting to Apple Music, but in time you might find it a useful way to keep artists' musings separate from your actual friends.

Apple Music has a strong focus on helping you to discover new things among a library of millions of tracks

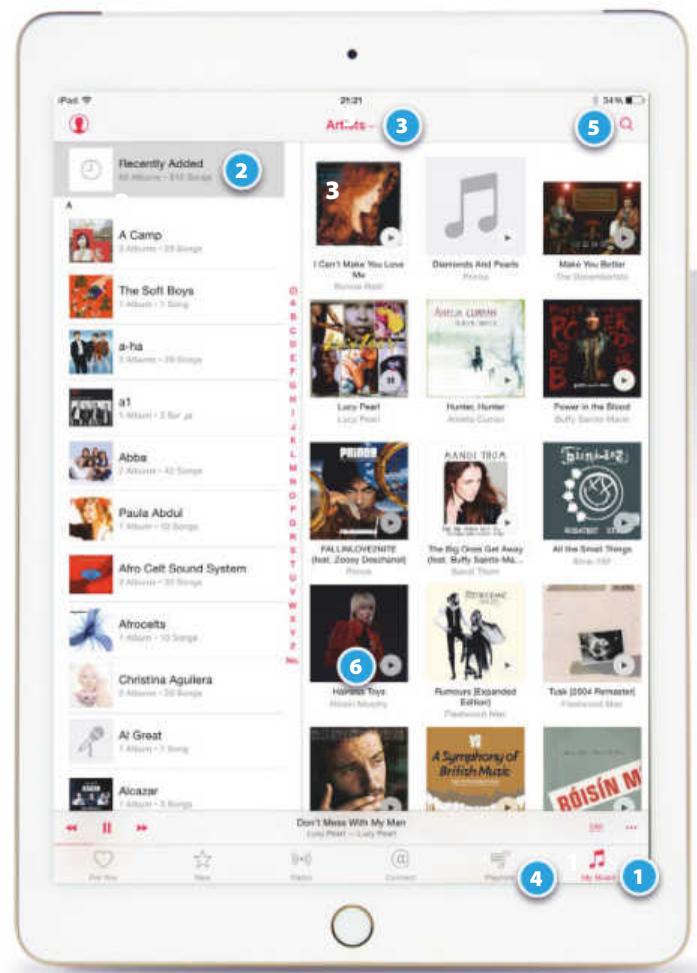
on portable devices. The features we describe also apply to iTunes 12.2 on your computer, though there are a few things that are possible only on one type of device or the other.

The service is about more than just giving you a massive library of music to explore at your own leisure. It also includes the Beats 1 internet radio station (which doesn't require a subscription), and genre-based radio stations (which do) and personalised stations that you create by selecting a song or artist that fits your mood.

Just as important, there's a strong focus on discovering new things to

One thing that might strike you as odd about Apple Music is that it's so separated out from the iTunes Store. You'll need to type into a search bar to reach most of what's in its library, yet you can add things to your personal collection, where you can rate tracks, add them to playlists, and download them to play offline just like tracks you've bought.

You'll frequently see a heart icon in Music and iTunes, and on your iOS device's Lock screen and in Control Centre. It's crucial to getting the most out of Apple Music when it comes to listening recommendations.



Browse your music

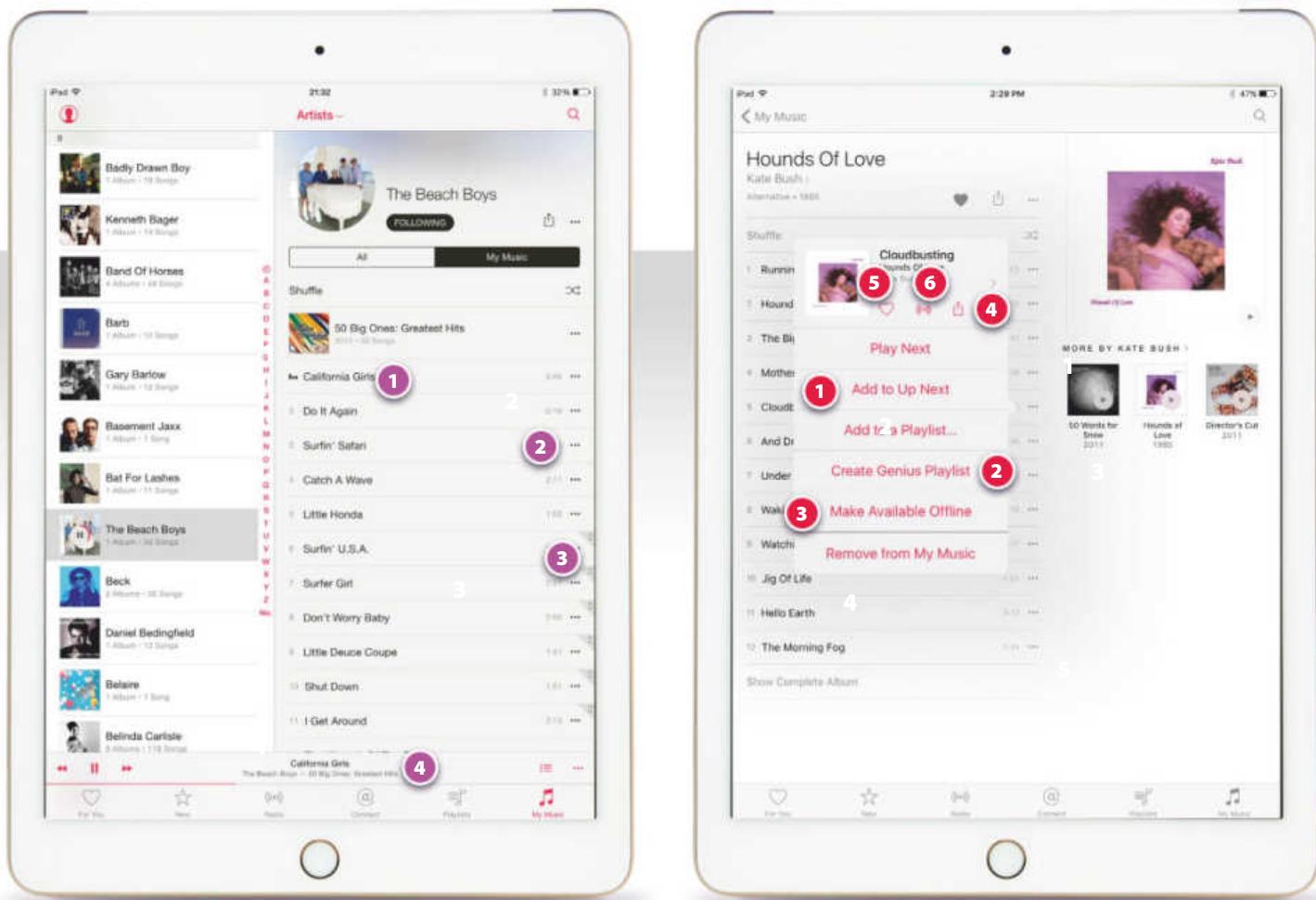
- 1 The views of your music that used to be in the bottom bar are consolidated in My Music.
- 2 This item saves you scrolling to or searching for things you likely want to hear a lot right now.
- 3 Tap a heading that shows a chevron to see more items or to modify the view. This particular heading provides ways to organise your music. (Sort your albums by title or artist in Settings > Music.).
- 4 On an iPad, your music library and playlists are two items in the bottom bar. On an iPhone, they're grouped into My Music.
- 5 Search your library or Apple Music's online collection.
- 6 Where you tap on an item matters. Large art shows an explicit play button, yet tapping elsewhere on it shows a track list. In the rows below, art is a play button, the rest of a row shows a track list.

New in iTunes 12.2

To use Apple Music on your computer, you'll need to update iTunes to version 12.2. Apple has already released a minor update to it, 12.2.1, which it says fixes a problem for iTunes Match subscribers that could cause

tracks to be incorrectly replaced with versions protected by digital rights management. It also fixes an issue faced by former Match subscribers, which requires you to follow a few steps – see <http://apple.co/1Jba9S9>. We've also

encountered problems with track number metadata in our existing library tracks being changed, so before using Apple Music, the usual advice about making a backup – in this case, of your whole library, is recommended.



Control playback

1 Tapping a track name plays it. If it's stored in the cloud, it's streamed to your device and cached until your device needs the space for something else.

2 Tap a More Options button (...) to download a track, an album, everything by an artist or in a genre. Tap the progress bar at the top of the screen to pause or cancel.

3 This triangle with a device icon in it identifies tracks that

have been downloaded to play offline. The best place to manage them is in Settings > General > Usage > Manage Storage > Music. Cached items aren't shown there.

4 The Mini Player shows what's playing. You can pause and resume playback here, or tap the More Options (...) button to do something with the track. Tap the name to open the Now Playing view; its heart button tells Apple you love the track.

Do things with your music

1 You can add items to the end of the playback queue, called Up Next, or insert one to play straight after the current track.

2 A track can be used to start a Genius Playlist of music of a similar vibe from your own library.

3 You can make a particular track or a whole album available to listen to when you're not connected to the internet by tapping Make Available Offline.

4 Share a link to an item to social networks and by methods such as email and AirDrop.

5 You can indicate to Apple Music that you particularly like a track or album by tapping the heart button wherever you see it; Apple uses this to help curate your recommended music.

6 You can create a station of music based on the album or track using this button.

Get started

It takes just a few minutes to sign up and start listening to millions of tracks

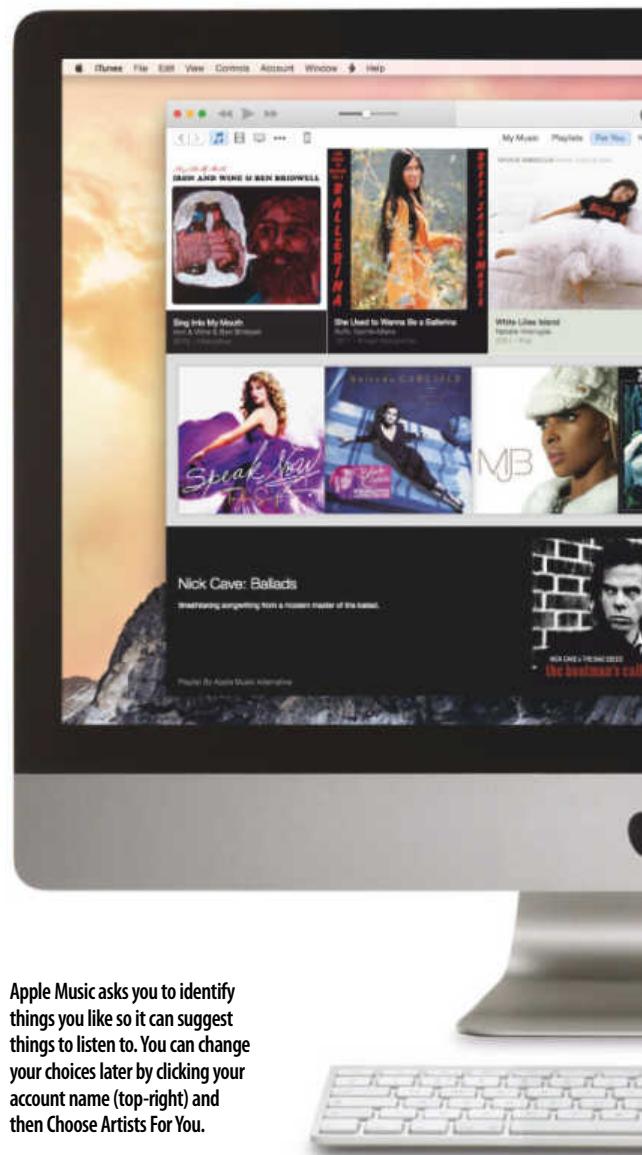
When you first open the new Music app on iOS or iTunes 12.2 on a Mac, you'll be invited to enrol in a three-month trial of Apple Music. This requires that the Apple ID you use to sign into the iTunes Store has a bank card registered for payment, rather than just having credit on your account from iTunes gift cards, so that Apple has a means to take automatic payment for the monthly subscription past that trial period.

You don't have to take up an Apple Music subscription to keep using iTunes on your Mac or the Music app on iOS devices to play your previous iTunes Store purchases or music bought elsewhere. It's also possible to hide almost all of the service's features (see page 82). If you later decide to try it out, you can make Apple Music visible in your apps once again and

then go to the For You page to start your trial from there.

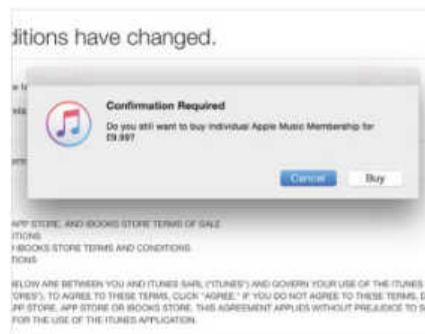
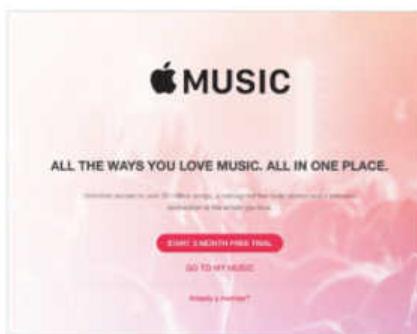
If you have a subscription to iTunes Match – or were planning to sign up to it to make your music collection, including tracks not bought from the iTunes Store, available to download from all your devices – Apple continues to offer that annual service. Its functionality is also part of Apple Music, so if you decide the extra features of the newer service are worth the total annual cost being more than five times as expensive, you should check and consider turning off automatic renewal of Match before the end of your current subscription period – do that in the same place as you manage your Apple Music subscription (see page 82).

However, if it's Apple Music that you're uncertain about subscribing to in the long term, you should also see page 82 for how to avoid automatically paying for it after your trial period.



Apple Music asks you to identify things you like so it can suggest things to listen to. You can change your choices later by clicking your account name (top-right) and then Choose Artists For You.

HOWTO | SET UP APPLE MUSIC ON A COMPUTER



1 Choose your plan

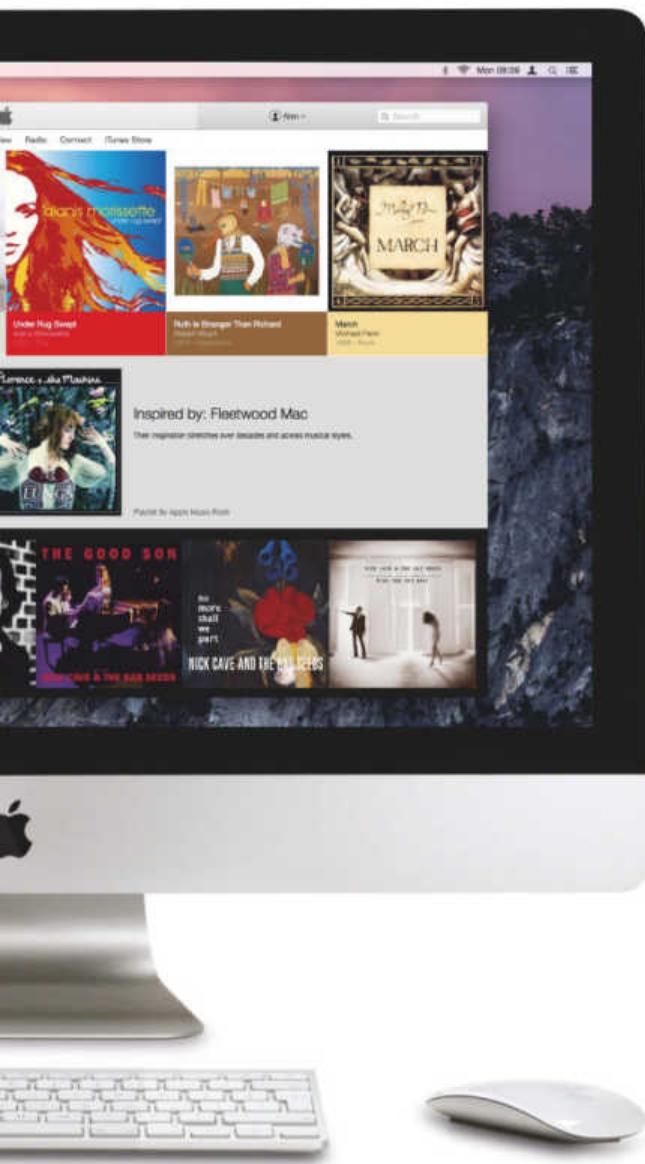
iTunes will prompt you about a three-month Apple Music trial. If you don't accept right away, click For You at the top of the Music view later on. Otherwise, click the button that starts the sign-up process, then choose an individual or a family membership (the latter requires Family Sharing to be set up – see page 140 for details).

2 Account management

You'll be asked to accept Apple's latest terms and conditions and confirm the *purchase* of a membership plan, because signing up for the trial automatically enables recurring payment at the end of it. If your Apple ID is part of a family and you aren't its organiser, you'll be asked to accept that an Ask to Buy request will be sent to them.

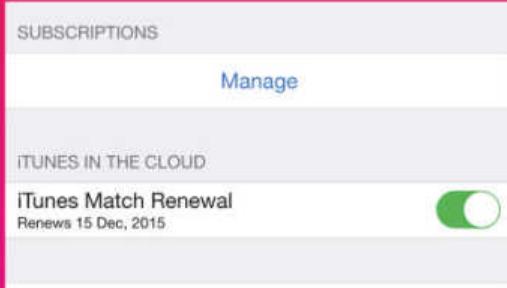
3 Say what you like

Click once on the circles of genres you like, twice on those you love, or put the pointer over those you dislike and click the cross that appears. Your choices influence the artists suggested when you click Next. Repeat the process, clicking More Artists if necessary. You only need to identify three you like, after which you can click Done.



iTunes Match

Apple Music includes the capabilities of iTunes Match, making tracks in the iTunes library on your Mac available to stream to all your devices no matter where those tracks came from. It does this by first matching tracks to those available in Apple's library, and secondly uploading any it can't match to your iCloud Music Library. All of those tracks are then available to play on all of your devices, but there's still a 25,000-track limit on the latter type, just like in iTunes Match. Eddy Cue, Apple's Senior Vice President of Internet Software and Services, recently tweeted that Apple is working to increase this number to 100,000 tracks by the end of the year. If you already subscribe to Match, there's currently no rebate on the dupe functionality in your Apple Music sub.



Playlists

Now you can make playlists even more personal, and listen to curated collections



ou might think there's little else Apple can do with playlists, but Apple Music's social side means there are new features worth knowing about.

Custom artwork

When you create a playlist (either on iOS or in iTunes on a Mac), there are a couple of new personalisations you can make besides its name. If you're

Playlist management

You can create folders to organise your playlists using iTunes on a Mac or a PC; the Edit button above the list of them on iOS lets you delete things, but with iCloud Music Library turned on, everything from your Mac is synced to your iOS devices. (You can't make truly Smart Playlists on iOS, though.)

Filter your playlists

By default, both your playlists and those created by Apple Music's staff to

You can add a photo, or artwork made created using an app like Pixelmator, to make your playlists even more personal

going to share the playlist, you might want to fill out a description for others to read. Tap the camera on the artwork placeholder to add your own artwork – either by taking a new photo, or by picking artwork you've already stored in the Photos app.

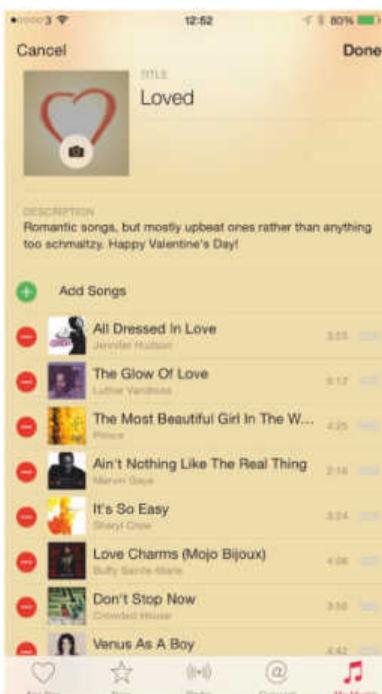
Share a playlist

You can share a link to a playlist on social networks or privately by tapping the More Options button next to a playlist in the master list of them, or the Share icon if you've already tapped through to see one's contents. When you choose Share Playlist, the preview will include your assigned artwork, but Facebook currently just displays 'Connecting to the iTunes Store', so it's wise to replace the status update the Music app provides to explain to people what the link will take them to.

Recently added

Just like the My Music view, there's a shortcut to recently added playlists – your own and those curated by Apple Music's staff (in the For You page). To save an Apple Music playlist from the For You page so it's easily accessible here in future, tap the More Options button above the playlist's description and choose Add to My Music.

which you've subscribed are shown. Though you can't file them in folders on iOS, tapping All Playlists above the list prunes what's shown to just the type you want to search through.



Curated playlists are a major aspect of Apple Music, and you can get in on the act by sharing yours – complete with custom artwork and descriptions.

New and For You

Discover a mix of new artists and music you might have overlooked in the past



The New and For You pages are key to discovering new music. The former shows new releases, much like the front page of the iTunes Store, and is worth checking out from time to time if you find that you rarely visit the store after subscribing to Apple Music. However, bear in mind that not everything that's sold in the iTunes Store is available in the Apple Music library.)

The New page has numerous categories for you to explore, some of which are persistently featured, while others are timed to major events in the

Playlists banner to find collections from well-known music publications.

A personalised touch

The For You page should more quickly guide you to suitable sounds, old and new, because its contents evolve in response to information you feed back to Apple. It draws on what you've said you love (by tapping the heart icon next to a track, album or one of Apple's playlists) and by what you listen to.

The page suggests specific albums and curated playlists, such as introductions to artists, but it doesn't cross-reference the former with what you own; at times, we've found that

The For You page's contents evolve in response to information you feed back to Apple as you listen to things

music industry calendar. It works well as a summary, but with so much scrolling and tapping and no guarantee that you'll find anything you like, discovering music this way can feel like a lot of work, so you might not want to give up on any music journals or websites that you've identified as giving great insight into what *your* ears will like – however, tap the Curator

we already own as many as half of the albums listed on the page.

You can provide negative feedback to influence future recommendations by holding your finger on an item and choosing I Don't Like This Suggestion. This works for albums and playlists on iPhone, but strangely only for albums on iPad – and the capability is missing entirely on the Mac at present.

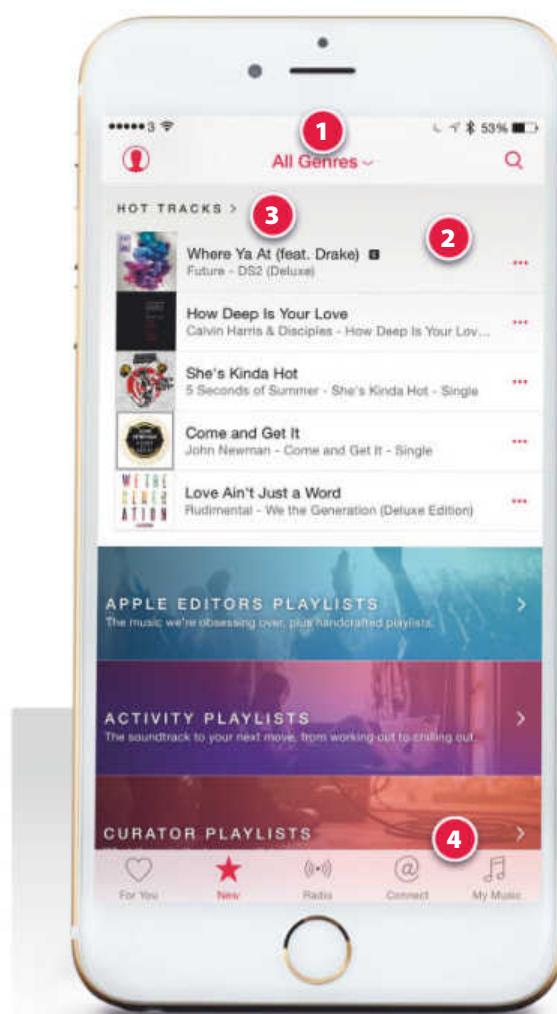
What if I don't want Apple Music?

You can hide the majority of Apple Music's features. First of all, go to Settings > Music on iOS, or iTunes > Preferences > General on a Mac or PC. Turn off Show Apple Music here to hide the New and For You pages. On an iPhone, this moves playlists to the bottom bar, rather than them being part of the My Music page.

Connect is disabled separately because you might still want to see artists' updates. If not, go to Settings > General > Restrictions on iOS and

turn off Apple Music Connect, or iTunes > Preferences > Parental on a Mac and disable the feature there.

You're still left with the Radio tab because you can listen to Beats 1 even without a subscription. However, the other radio features – other curated stations and the ability to create personalised stations using an artist or a track as an indication of what you want to hear – require a subscription in most countries (<http://apple.co/1GstJTP>).



Explore new releases

1 The New page defaults to showing music of all kinds. You can narrow it to suit your tastes, or just what you're looking for right now, by tapping All Genres at the top of the page and picking a more specific type. The list of genres, like the one in the iTunes Store, lacks some obvious categories, such as folk, easy listening and indie rock, so you'll need to make educated guesses about where such sounds fall within Apple's broader categories. Also note the explicit New Artists genre, should you want to get off the beaten track.

2 The page includes a mix of different items, including individual tracks and hot albums. Scroll down a little way and you'll find links that take you to special playlists containing what Apple's

music editors are into, music suitable for activities such as driving, exercising and to wake up to, and from music mags and sites.

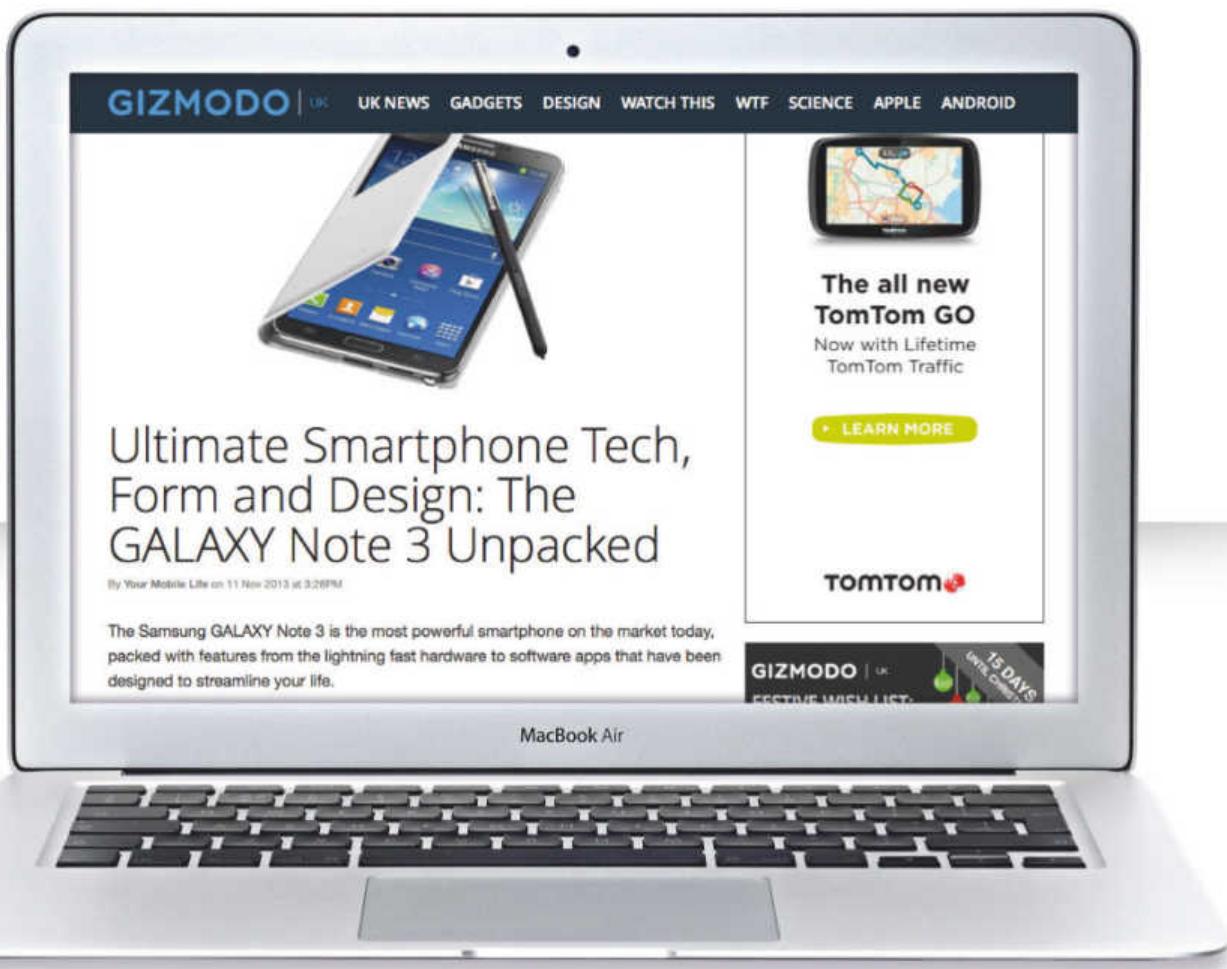
3 Remember, there's more to discover than is initially shown, so watch out for chevrons next to category headings.

4 Scroll down to the bottom of the page to find A-Lists, which gather notable tracks from various genres. Apple's descriptions for them suggest they're compiled from tracks released in the current week, but at launch we found Taylor Swift's *Shake It Off* and other tracks released over the last few months, suggesting A-Lists might be a good way to catch up on what's popular in the medium term, much like *Now That's What I Call Music!* albums.

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Enjoy video on your iPad

Watching movies is even better on the iPad's Retina display

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9



With its stunning, high-resolution display, your iPad is great for watching movies wherever you go. The iTunes Store offers a large range of movies, music videos and TV programmes to buy or rent: just open up the Videos app, tap on Store and then choose Films or TV Programmes. You can search by genre, browse featured items and charts, or tap in the search bar at the top-right and type what you're looking for.

When you've found something you want, tap on the Buy or Rent button (just a price tag for items that can't be rented), enter the password for your Apple ID, and your download will commence. Once it is complete, you can watch your video by switching back to the Videos app – see the facing page for a guide to its controls and options (tap the movie while it's playing if these aren't visible on the screen).

If you use iTunes on your computer, you can also purchase movies there, or even use iTunes to transfer your



home movies or other videos to your iPad. For the latter you'll first need to go to File > Add to Library to import the video, then possibly also go to File > Create New Version > Create iPad or Apple TV Version to optimise the footage for viewing on your device. Note that both iTunes and your iPad can be fussy about video formats. The niceties are too complex to go into here, but broadly speaking you need H.264-encoded .m4v, .mp4 or .mov files – for all the information you need, visit support.apple.com/kb/HT2729. To transfer the videos, connect up your iPad, click the device icon that appears near the top-left of iTunes, and choose what to sync in the Music, Movies and TV Shows tabs (under Music, tick 'Include music videos'). Once transferred, you can watch them in the Videos app.

If you want to watch videos in other formats not supported by the Videos app, you'll also find other player apps available in the App Store, such as VLC.

Video can quickly fill up the storage space on your iPad, but an alternative is to set up Home Sharing in iTunes on your computer (File > Home Sharing) and in Settings > Videos on your iPad. You can then stream videos over your home Wi-Fi network from your Mac, without using storage space on your iPad. With your computer switched on, open Videos on your iPad and tap Shared to browse video content in iTunes on your Mac just like you would if that stuff were on your iPad.

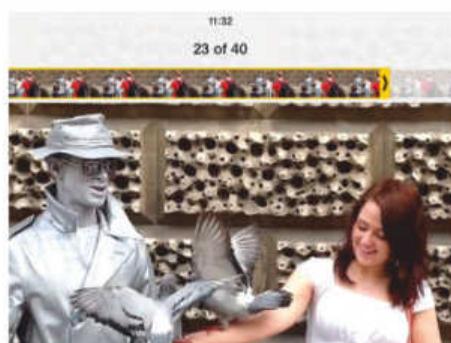
If you've shot video footage yourself on your iPad, it is stored in the Photos app, from where you can view, trim and share it (see below) – just tap Albums at the foot of the screen, then Videos.

HOW TO | SHARE YOUR OWN FOOTAGE



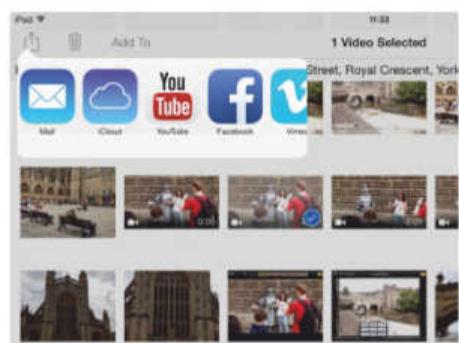
1 Find your video

Want to share your home movies? Go to the Photos app and you'll see the video clips you've shot alongside your stills, marked with a distinctive symbol, or tap Albums > Videos. Tap one to view it. Tap the screen and a scene reel appears at the bottom. Tap on the reel or on one of the frames to jump around the video footage.



2 Trim your footage

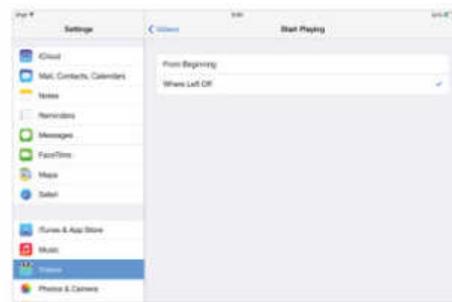
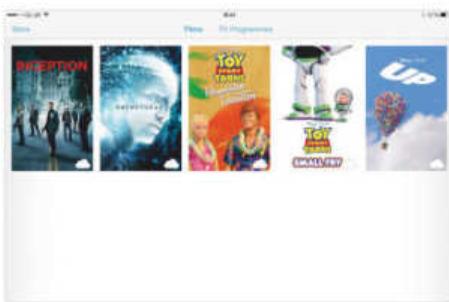
If you've shot a lengthy video, you won't always want to share all of it. Drag the yellow handles at either side of the reel inwards to define the footage you want to keep, then tap Trim followed by Save as New Clip. The full length of what you recorded is still available to use elsewhere, such as in iMovie (see page 128).



3 Share your footage

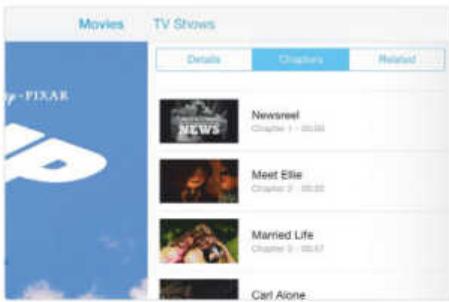
Now tap the Share button, and choose how to share your edited footage: as an email attachment, in a Message, or via YouTube or social networks. Your iPad can record HD video at 1080p with its rear camera or 720p with its front-facing camera; the file size of the video is automatically reduced when shared.

HOWTO | USE THE VIDEOS APP



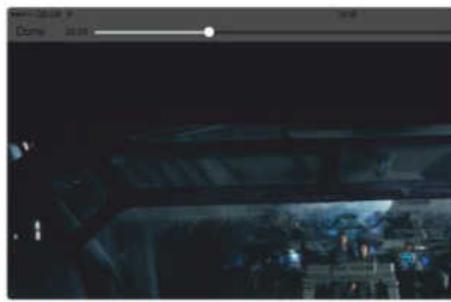
1 Browse your Library

Open the Videos app and pick from the Films, TV Shows and Music Videos stored on your iPad (or in iCloud, if you enable Show All Videos in Settings > Videos). A Shared tab will appear if both your computer and iPad have Home Sharing on and are on the same network.



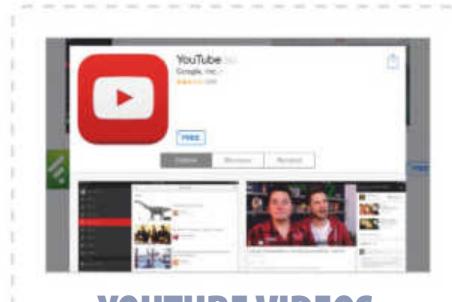
2 Home Sharing

Home Sharing enables you to use a Wi-Fi network to watch videos that are stored on your computer without having to download them to your iPad. First switch this on in iTunes (File > Home Sharing), then on your iPad (Settings > Videos) and enter your Apple ID details.



3 Set to play

While you're in the Settings app, you can also choose whether your videos will always play from the beginning or resume from where you left off last time. The latter option is very handy for when you can only grab snippets of a show or movie while on the move.



YOUTUBE VIDEOS

The YouTube app is no longer pre-installed, but it's a free download from the App Store. Bear in mind that streamed video can chew through your data allowance on a mobile connection.

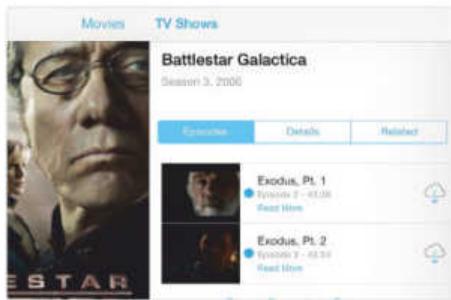
4 Chapter control

Most TV shows and movies are split into chapters. To access the Chapter menu, tap the movie and then tap on the chapter you want. Alternatively, tap the Next or Previous Chapter button during playback; to fast forward, tap and hold a finger on the Next Chapter button.



5 Navigate long movies

You can also scrub through a video to quickly reach any point in it – tap and drag the slider at the top, and use the time displays as a guide. Slide your finger down or up to adjust scrubbing speed. To make the video fill more of the screen, tap the double-arrow (top-right).



6 Closed captions

Some movies and TV shows come with closed captions (subtitles). They'll have a CC logo included in their descriptions in the iTunes Store. To enable subtitles, go to Settings > General > Accessibility > Subtitles & Captioning and switch on 'Closed Captions + SDH'.

7 Pick an episode

Under TV shows, tap one to bring up a list of its episodes, where you can choose which one to watch. Tap one and it will play from where you left off, or from the start if you have not watched that episode at all before (or if you previously reached the end of it).

8 Keep it clear

To stop your iPad filling up with shows you've watched, you can delete any you don't want: swipe to the left on an episode that's on your iPad to reveal a Delete button, then tap it. You can do the same with movies, but note that deleting a rented movie removes it for good.

Buy music and video

The iTunes Store is a great way to get music, movies and more

SKILL LEVEL

Anyone can do it



IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9,
iTunes account

The iPad is the perfect portable entertainment device, whether you're into music, movies or TV. In the distant past, you had to get all your media onto your device by syncing it from iTunes on your computer, but these days it's perfectly feasible to fill your iPad with media without ever connecting to a Mac or PC.

You don't have to get material from the iTunes Store either, but for many people this remains the easiest option whether they're using a computer or on the move, thanks to the built-in iTunes Store app on the iPad.

You have access to the same content and features on the iTunes Store whether you're using a computer or your iPad. You can browse the seemingly endless streams of music, film, TV shows and audiobooks, keep up to date with releases and happenings, discover new artists, films and TV series, make purchases, and even send your friends iTunes gifts.

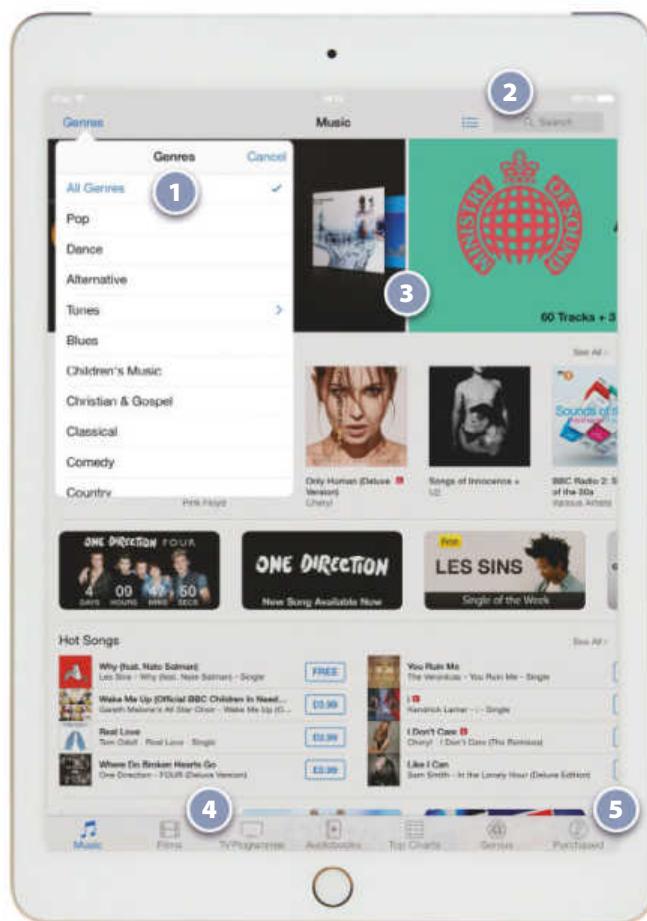
To buy something from iTunes, tap its price and enter your Apple ID's password, just like buying an app. You can also hear

a preview of a song by tapping its name rather than its price. Previews are up to 90 seconds long, so you can really get a feel for the song. There are also previews for films in the form of trailers, and in many cases you can choose whether to buy films or rent them. Films and TV shows are also often available in both HD and SD versions, with the HD versions costing slightly more.

Buy once, download many times

Helpfully, you can get your previous purchases on your different devices without the hassle of syncing. Whether you buy music and other media on your Mac, iPad or iPhone, you can set it to automatically download on your other devices. You can turn this on in Settings > iTunes & App Store on your devices. If you choose not to turn on automatic downloads, you can still easily download purchases free of charge on any device linked to the same Apple ID: simply tap Purchased at the bottom of the iTunes Store app.

VISUAL GUIDE | GET TO KNOW THE iTUNES STORE APP



Discover new stuff

1 Each media type in iTunes has several sections for you to browse (though you'll probably use search most of the time). These sections are accessed by tapping the Genres option at the top, which then opens up a full scrollable list. Tapping the list-like icon at the top-right displays items that you've previewed or added to your Wish List.

Search

2 Know what you want to buy? The iTunes Store makes it easy to find – just tap the search field, start typing, and results will start to appear immediately, increasing in accuracy as you keep typing.

Featured content

3 The large top panel on the home page is a great first port of call in the iTunes app, with its featured content. Think of it as a mini media feed, keeping you updated with new releases.

Media categories

4 The iTunes Store is your one-stop shop for all sorts of media. Tap items in the bar at the bottom to browse through films (most of which can be bought or rented), TV shows, audiobooks or, a little illogically, the charts in all categories.

Purchased items

5 Tap Purchased to see the media you've previously bought using your iTunes account. You can look through your past purchases and redownload any you like onto any of your iOS devices at no extra cost – just tap the cloud icon next to an item.

Useful tools

Your iPad comes with some handy extras



These days we all live our lives on the move and rely on our iPads and iPhones for much more than just communications. They give us access to key info wherever we happen to be, and also offer a host of practical functions.

Swipe upwards from the foot of the iPad's screen to open Control Centre, which gives you instant access – Swiss Army Knife style – to some of the handiest features you might want to call on in a hurry, including the

Camera and Clock apps. By default, the latter opens to its timer feature, ready to start a countdown, but you can just as easily switch to its stopwatch or other functions.

Apple provides a bunch of other apps and utilities that perform very specific yet useful functions. Many are built into iOS, some you need to download on a 16GB iPad – GarageBand, for example – as they take up a lot of space, so Apple leaves it to you to decide which you really need. Here are six of the best that should get your attention.



IN BRIEF | SIX USEFUL APPS



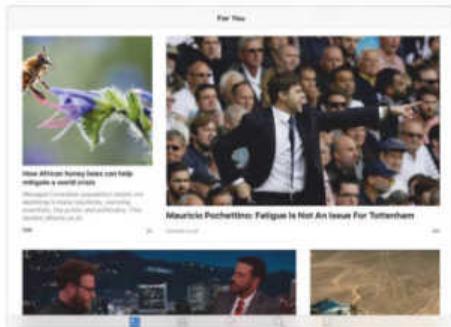
1 Photo Booth

This app provides a bunch of fun effects to use with both of the iPad's cameras. You'll want to try out the front-facing one first, by making silly faces that the app then processes with amusing effects live on the screen. The results can be saved to the Photos app.



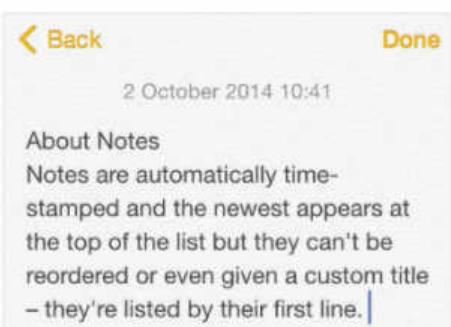
2 Clock

The clock displays the time zone in which you set up your iPad, plus any others you add. Tap the icons at the bottom to set an alarm, time an event or start a countdown. The timer can play music for a set time while you fall asleep. See page 88 for tips about alarms.



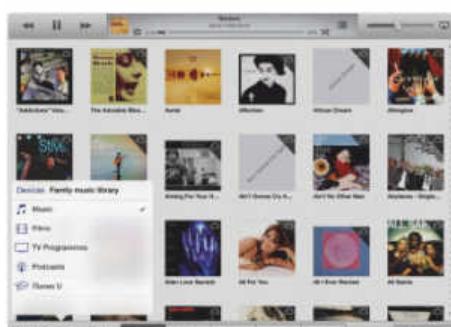
3 News

With iOS 9, Apple introduced the News app to the Home screen. This aims to help you keep on top of news stories that matter to you by offering a number of subscription channels categorised by topic, newspaper or website. For more on how to use News, turn to page 92.



4 Notes

Apple has given Notes a huge makeover in iOS 9, making it a worthy alternative to apps such as Evernote and Microsoft OneNote. You can now add images, URLs and create checklists. You can also get creative with different text styles and then sync all your notes with iCloud.



5 Remote

This enables you to control iTunes on your Mac or PC, and to select an AirPlay receiver for iTunes to stream to (see page 138). It can also control an Apple TV, enabling you to navigate with gestures and search the iTunes Store using the iPad's on-screen keyboard.



6 GarageBand

GarageBand is great for noodling about with virtual guitars and pianos, yet it's also a full-fledged set of instruments that can help you learn to play, or practise if you already do. To make your first song within GarageBand's easy-to-use environment turn to page 174.

Wake up with the alarm clock

After a little late-night reading, use your iPad to rouse you from slumber...

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



The Clock app is capable of doing much more than just telling you the time – after all, you can see that at the top of the screen in most places in iOS. The app also has stopwatch and timer functions, but it's the alarm clock feature we're going to talk about.

Like an old-school alarm clock, the app can wake you with a klaxon sound,

yet it also lets you wake to far more soothing sounds if you prefer to start the day with a little less of a fright. New tones can be bought from the iTunes Store (which you can then use as sounds for other iPad features, such as FaceTime – see page 42), or you can use any of the songs you've downloaded to the Music app, or synced from iTunes on your computer. However, songs will play

from their beginning; to choose a specific segment of a song, import it into GarageBand (see page 174) to trim and export the range you want to hear.

When an alarm sounds, you can get nine extra minutes of rest by tapping the screen or using the iPad's physical volume controls. And you can use Siri to check your alarm times, set new ones, and even to delete all your alarms.

VISUAL GUIDE | THE CLOCK APP

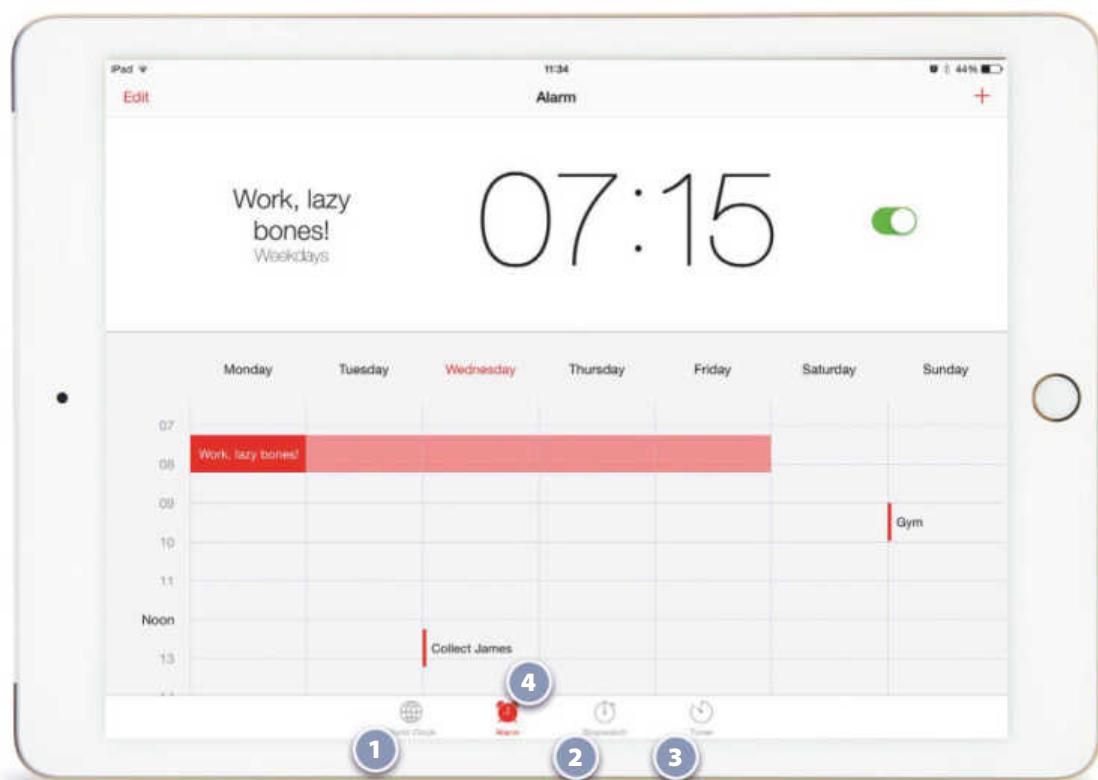
Take a whirlwind tour of the four major features of the iPad's Clock app

World Clock

1 This shows the time, temperature and weather conditions at major cities of your choice. Tap one of the slots marked with a + at the top of the screen, then type into the search bar or scroll through the list to find the location you want to see on the map. When all of the visible slots are filled, swipe leftwards on their row to bring another six into view.

Stopwatch

2 This will be indispensable if you are responsible for a sports team or are helping out a friend with their training. Tap Start to begin counting, and then tap Lap at the appropriate time to record each circuit to the log (the stopwatch will keep counting), or tap Stop when you're finished. Sadly, the Clock app provides no way to export your lap times; you can take a screenshot by holding the Home button and quickly pressing the sleep/wake button. The screen will flash to confirm, and the screenshot will be added to the Photos app. However, if you're doing serious training, you should investigate the Health & Fitness category in the App Store.



Timer

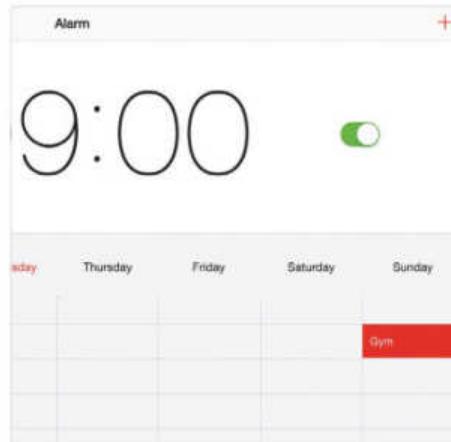
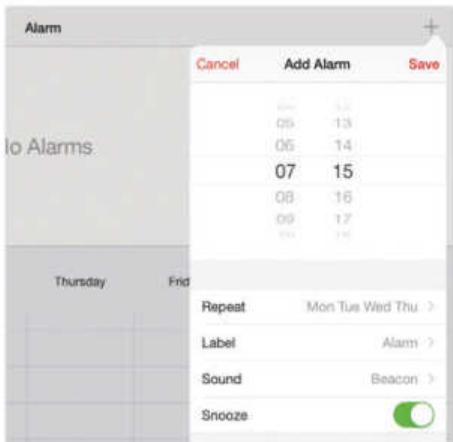
3 Dial in how long you want the app to count down, in hours and minutes, and tell it what sound or song you want it to play at the end. Like the Alarm feature, you can ask Siri to set a timer; the "Hey Siri" shortcut (see page 96) is particularly useful if your hands are busy in the kitchen.

Alarm

4 Tap this to see your alarms on a week-long view, similar to how events can be shown in the Calendar app. Each alarm shows its label, but if several occur in a short space of time, you'll only see the label of the latest one in that group; the earlier alarms around that time will be

reduced to a tall, thin bar at the left-hand side. You can't just tap to set an alarm, but you can tap and drag existing alarms up or down to adjust their time – they'll snap to zero, 15, 30 or 45 minutes past the hour, unless you first drag your finger left or right off the alarm – then dragging vertically moves the alarm in five-minute intervals.

HOW TO | SET AND MANAGE YOUR ALARMS



1 Set an alarm

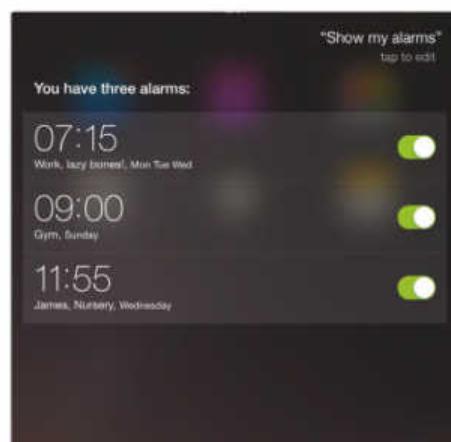
Tap Alarm at the bottom of the screen, and then the + at the top-right corner. This opens a form in which you set up your alarm: its time, how often it repeats, a label ('Alarm' by default, though customisable), which sound or song will be played, and whether the snooze option is even available. Dial in a time, then tap Repeat to choose the days of the week on which the alarm will be active. When you have at least one alarm turned on, a tiny alarm clock icon near the right of the status bar will remind you.

2 Snooze options

The Snooze switch is turned on by default for new alarms. If you leave it on, you'll be able to mute an alarm by tapping a small button on the iPad's Lock screen, or by pressing one of the volume controls. The alarm will trigger again nine minutes later. With Snooze disabled, you'll need to swipe on the screen to dismiss the alarm. You can work around being unable to customise the snooze duration by setting a second alarm to give yourself the extra amount of time in bed that suits you.

3 Switch off alarms

Tap Save and your alarm will appear on the week-long view; although setting labels is optional, it's a good idea to change them if you have many alarms, to help you remember their purpose. Tap an alarm (it'll be highlighted in red) and you'll see its exact time at the top of the screen. Note the switch near the top-right, which sets whether the selected alarm is active; you can use it to, say, temporarily turn off your morning alarm when you're on holiday – but remember to come back and turn it on later.



4 Review alarms in a list

Tap Edit at the top-left to see all of your alarms in a list, ordered chronologically by time of day, but not necessarily by day of the week (because some might occur on multiple days). Active alarms have a white background, inactive ones are grey. Tapping an inactive alarm and then Save turns it on. You can tweak any of the settings you chose in step 1 here. Also note that when creating or editing an alarm, you can set it to a precise minute, not just the five- or 15-minute intervals available on the week view.

5 Mute and Do Not Disturb switches

The Mute switch in Control Centre (it's a physical switch on older iPads) silences the sounds from notifications, alerts and effects such as the keyboard clicking, but it doesn't silence purposeful sound, such as music, videos and, of course, your alarms. Likewise, alarms are an exception to the range of sounds that are silenced when you turn on Do Not Disturb in Control Centre, so you can safely shut out intrusions with the assurance you'll be woken.

6 Control alarms with Siri

You can ask Siri to set alarms with phrases like "Set an alarm for 7" and "Wake me tomorrow at 8". Ask it to show your alarms and it will display all of them (or a summary, if there are many), or you can ask for those in morning, afternoon or evening. It can change your alarms, too ("Change my 8am alarm to 7"). If you have few alarms and don't mind recreating them after taking a long holiday, say "Delete all alarms". Remember, you can say "Hey Siri" to interact with Siri without handling your iPad.

Master Game Center

Top the Game Center leaderboards and become a high-score hero

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9, at least one game that uses Game Center



Back in the good old days, the primary aim of many arcade games was to top the high-score table. Having spent countless hours shoving coins into a machine and mastering its intricacies, you'd finally achieve the coveted prize of being the very best – at least until the machine was unceremoniously turned off.

Modern gaming is rather more enlightened, if only because it tends to have a better memory – these days, high-score leaderboards and achievements are often stored online. Better, these can be worldwide tallies or tailored specifically to your own group of friends who enjoy the same kind of dot-munching, alien-killing, bird-flinging, puzzle-solving, breakneck racing that you do.

Game Center is Apple's take on what's become a kind of multiplayer gaming version of social networking. Not surprisingly, it's rather popular: many tens of millions are signed up to the service, and a vast number of iOS games support it. Depending on the title in question, you can compare scores with friends and battle to collect achievements, all the while adding to your Game Center points tally for extra bragging rights.

The service also provides a foundation for multiplayer gaming. It supports both turn-based titles like Super Stickman Golf 2 and Letterpress, and also live efforts such as racer Asphalt 8. Depending on the game, you can challenge a friend or be automatically matched with people with a similar level of experience.

1 All about me

The Me screen is your Game Center overview. Important statistics sit inside floating balloons, and these or the toolbar buttons are used to access Game Center's sections. You can also personalise the Me screen a little: tap the speech balloon to add a short catchphrase; tap the photo and select Choose Photo to use a photo from your on-device library, or tap Take Photo to take a new one with the iPad's camera.

2 Making friends

The Friends list can be reordered alphabetically, reverse-chronologically or by points earned. On selecting a friend, tap a game and then Points to compare achievements. To make a new friend request, tap the + button. In the Friend Request window, add a Game Center ID/ email address and a message, then tap Send. Received requests will appear above the buttons for reordering the list and can be accepted or ignored.

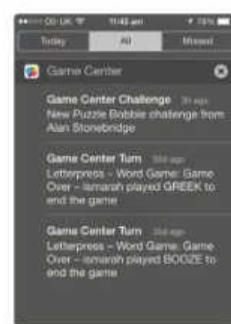
3 Games collection

The Games tab provides access to recommended games (or, as we call them, 'adverts') and then your own games; a search field enables fast access to a specific title – useful, given that the games list is only ever ordered reverse-chronologically. Each game's icon is displayed, along with when it was last played and the number of achievement points you've won out of a possible total. Tap to access leaderboards.



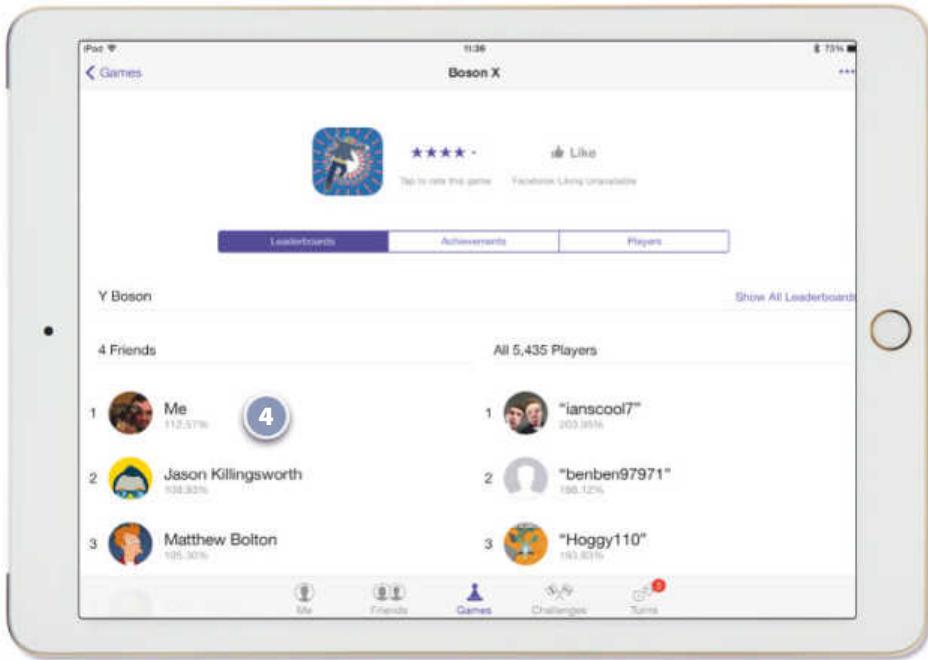
Be alert

If you're a keen gamer, it pays to know how to tone down Notification Center, otherwise you'll be driven bonkers by constant updates. In Settings, tap Notifications and then Game Center. You can then define how you're alerted to updates, such as multiplayer moves and challenges. (We recommend turning off sound!) Individual games will also often send their own notifications, some of which will be rather spammy/nagging in nature. These can be reduced or turned off entirely using the same controls in the Settings app.



4 Scoreboards

Individual game pages vary. At most, you'll get tabs for Leaderboards (high score tables), Achievements (one-off in-game targets that award you Game Center points), and Players (friends who own the game). If a game has multiple leaderboards, you'll have to select one from the list. On accessing a leaderboard, high scores specific to your friends list will be displayed at the top.



Get set

Game Center has its own section in Settings, which warrants exploration before you use the service. It enables you to define which Apple ID is used, whether your profile is public (tap on the profile, sign in and set the control as appropriate), and which contacts are used as the basis for friend recommendations. The controls for invites are also important; if Allow Invites is turned off, your friends won't be able to invite you to new games – only the reverse will work, assuming they have Allow Invites activated.



Deleting games

When deleting an app, iOS also deletes its data from your iPad. For games that use Game Center, you get the option to keep your scores; these are then picked up if you redownload the game. Whether a record of levels you've cleared is also restored depends on whether the game previously saved data to your iCloud account or, less common, to other cloud-based storage such as Dropbox.

5 Rise to a challenge

Challenges sent to you appear in the Challenges tab. Tap Play Now to accept (a price tag that links to the App Store replaces this if you don't own the game) or Decline to pass. To issue a challenge to all friends, tap an achievement or score on a game's page and then Challenge Friends. For an individual challenge, select someone from Players on a game's page, tap Send a Challenge, then tap a score or achievement.

Taking turns

Turn-based games (either asynchronous or live) work on iOS in various ways, but many games use Game Center. Although you can receive updates regarding new moves and challenges as notifications, Game Center's Turns tab also provides a recent history, along with access to currently active games. To take your turn, simply tap an active game, tap Play to take your turn, and the relevant game will open.

Get personalised news

Find all of your news about the world and personal interests in one place

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iOS 9.1



Apple's News app provides you with a single place to catch up on happenings related to all your interests, whether that's current affairs, technology updates, the world of entertainment or something else. If you've ever subscribed to a favourite website's updates using RSS, you'll be familiar with the concept – the difference here is that you don't need to visit a site using the Safari web

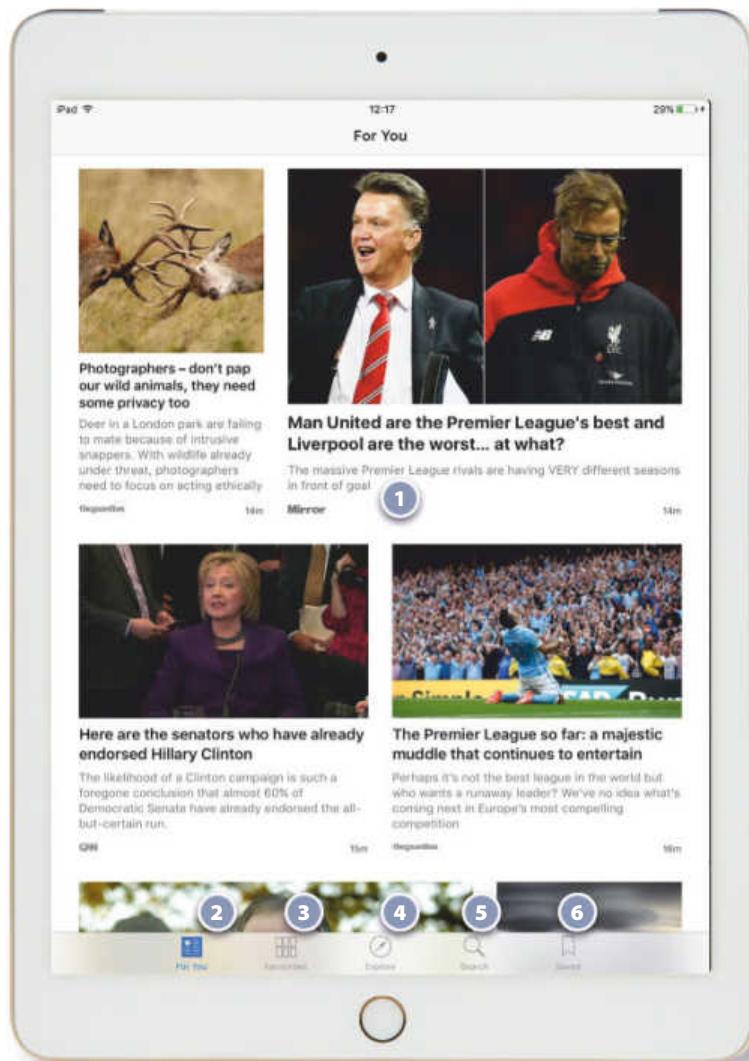
browser. Instead, news organisations and other types of publishers sign up to be listed in Apple's catalogue of content providers, which you can browse in the News app and tap a button to add them to your customised digital newspaper or magazine, however you want to view it.

Of course, you'll want to be able to share interesting things you read with other people. Naturally, the sharing options built into iOS – to mark things

as favourites or to send links to them by private message such as email or to social networks like Facebook and Twitter – are available in the News app.

Apple's News was initially available only in the USA. However, updating to iOS 9.1 adds the app to your device's Home screen if you're in the UK and Australia (note that the Region setting in Settings > General > Language & Region needs to be set accordingly).

VISUAL GUIDE | THE NEWS APP



iOS 9's Spotlight Search uses Siri to predict what you'd like to do next

News stories

1 News from your subscribed sources appear here, with a short excerpt, a logo that indicates the source and an indication of how long ago the item was published, and sometimes a thumbnail image, too. You can simply tap an item to open it. Alternatively, you tap and hold on the preview to mark the item as something you like, to save it to your reading list, or to share the item with other people by private message or on a social network. These same actions are available from icons in the bottom toolbar once you've popped open a story.

For You

2 Select stories from your favourite sources are displayed here in rows, sometimes with a preview image accompanying them. Sometimes the app will mix in categories that might be of interest, so that you don't only discover them by manually (see point 4).

Favourites

3 Any sources you subscribe to during the initial set-up process, or later under Explore (see point 4) are listed here. Tap one to browse its full range of updates.

Explore

4 Tap here to find more news sources. The advantage of this page is that you can browse by topic, including technology, sport and health, so you can add specific interests to your list of favourites.

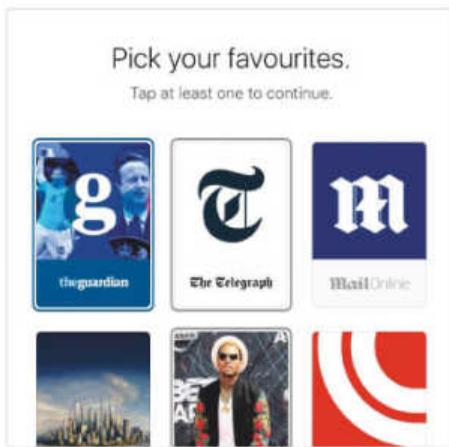
Search

5 Just like searching the iTunes Store for music and films, you can enter search terms, from very broad ones, such as TV, to very specific interests, such as Star Wars.

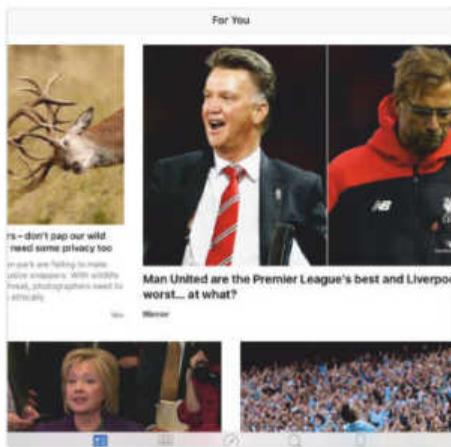
Saved stories

6 You can bookmark individual stories so that they are easy to find even as time passes. Saved stories are shown in a list just like the For You page, and you can share them in a private message or on social media from here, too.

HOW TO | SET UP YOUR NEWS SUBSCRIPTIONS

**1 Get started**

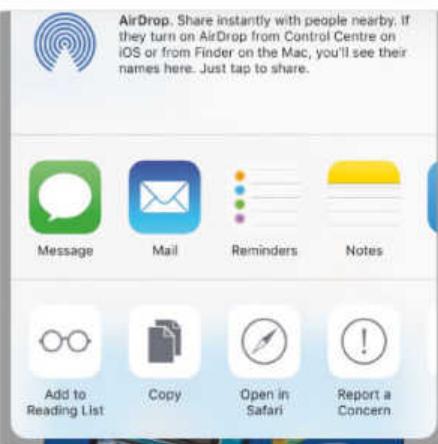
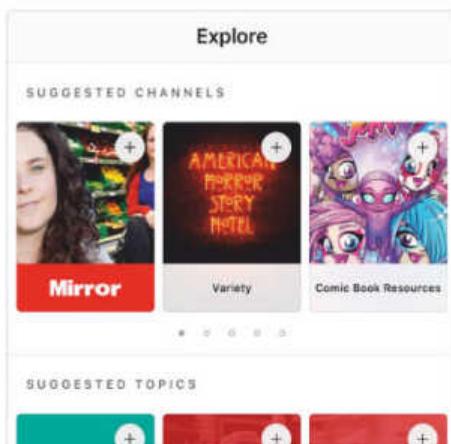
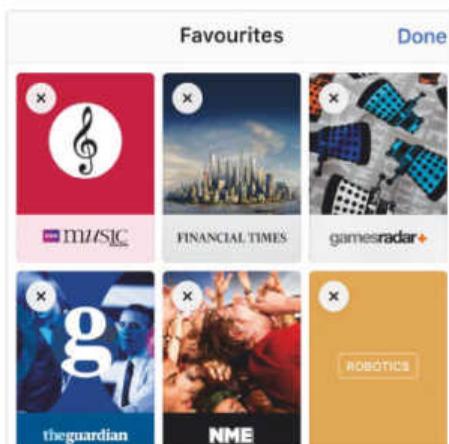
When you open the News app, you'll be presented with a short description of what it does, and a link to the service's privacy policy. Tap Get Started, then browse the suggested channels, tapping any you want to subscribe to, which highlights them with a blue border. More channels appear as you scroll down, but once you've added major news providers, you're better off tapping Continue at the bottom of the screen and finding specialist interests another way, which we'll look at in a moment.

**2 Stories selected for you**

When you tap Continue, the app prepares a list of stories from the channels you selected, then takes you to the For You page, which lists them. Tap a story to read it. (If you come to use News on an iPhone 6s, lightly press on a story to peek at it, then press harder to pop it open if it looks interesting.) Listed items you've read are greyed. If you only want to read a channel now and then, open one of its stories, tap the Share icon, then Mute Channel in the bottom row. (You can access its stories in the Favourites tab.)

**3 Share and save stories**

When reading a story, three icons appear at the bottom of the screen. First is iOS's familiar Share icon, which enables you to share the story on social networks and in private messages, add a link in the Reminders or Notes apps, open the version published on the web in Safari, and report concerns about the content. The heart icon marks a story as something you like, but you'll find the bookmark at the bottom-right is more useful as it adds the story to the Saved page so you can quickly find it again.

**4 Favourite channels**

Channels you added during step 1 are listed here, and you can add more from the Explore page (see step 5). To remove a channel, tap Edit at the top-right and then the 'X' at the top-left corner of any channel. Tap Done to return to reading. Tap a channel listed here to browse just that publisher's stories, rather than the mix of them shown in the For You page. Browsing some channels directly, such as The Guardian and The Telegraph, provides a means to browse their broad content by category.

5 Find more channels

At the top of the Explore page, the app suggests channels and topics you might also be interested in. Tap the '+' at the top-right corner of one of them to subscribe to it, or tap elsewhere on its graphic to investigate the content it offers; you can then tap the '+' at the top-right of the screen to subscribe to it. Further down the Explore page, you can browse for channels by category; the same shortcuts described above work there, too. If you still can't find what you want, tap Search and enter some keywords.

6 Reading tips

Among the actions listed when you tap the Share icon while reading a story is Report a Concern. This draws Apple's attention to content that's contentious in some way, or which is broken or improperly categorised (and so not what you expected from its channel). One last tip: when you open stories that originate on a channel's website, you'll see only a summary until you swipe upwards to load the whole thing. This can be overridden in Settings app; go to News and turn off Show Story Previews.



Next Steps

Once you've mastered the apps, there's more on offer from Apple

- 96 Using Siri voice control**
Command your iPad using just your voice
- 100 Search with Spotlight**
Find things with iOS 9's built-in search feature
- 102 Declutter your Home screen**
Keeping your apps organised
- 104 Free up some space**
Make room for new apps and media
- 106 The basics of iCloud**
Back up and sync with other devices
- 108 Using iCloud Drive**
Put things online from all of your devices
- 110 Setting up iCloud Keychain**
How to use Apple's online password service
- 112 When to use iCloud.com**
Find out file recovery, email rules and more

NEXT STEPS | Siri

Use Siri for voice control

Control your iPad using your voice. Say “hey” to Siri...

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9, an internet connection

S

iри is Apple's voice control technology. By holding down the Home button, you can use Siri to do all kinds of interesting things with your iPad.

Siri can deal with instructions and questions, such as looking up information online, adjusting alarms, setting reminders, and creating calendar events.

Ask Siri about a song that's playing and it will use your iPad's microphone to briefly listen, look up the track's identity, and then provide a link to buy the song from the

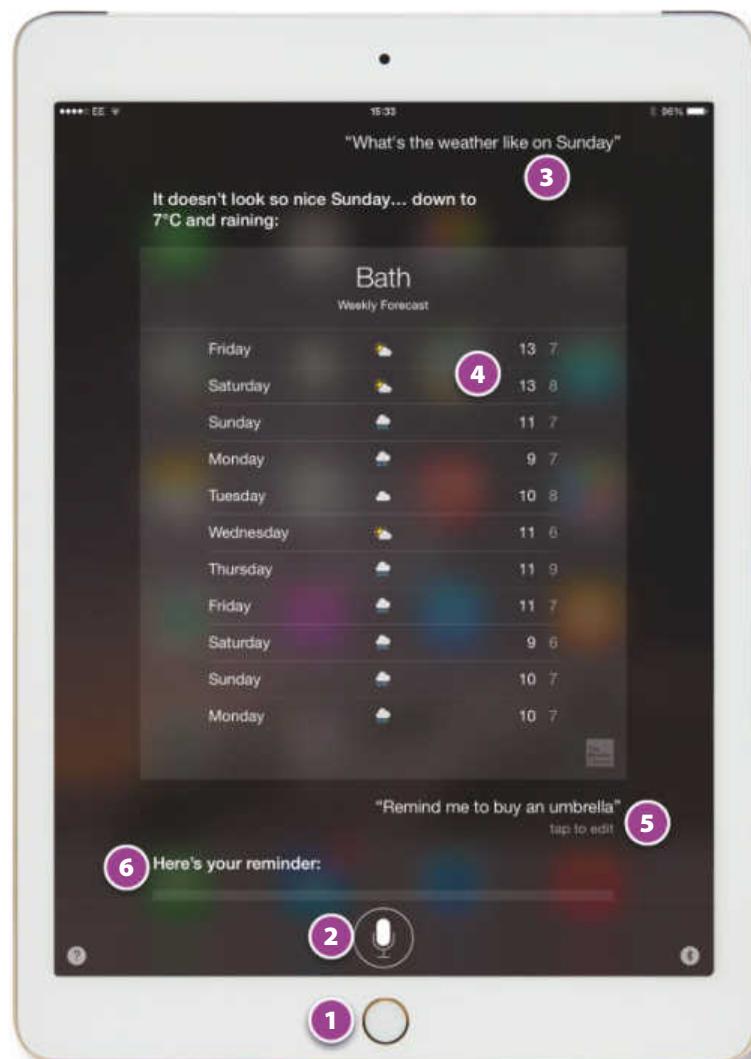
iTunes Store. If you don't buy the song right away, it gets added to your Wish List.

Siri is personable in its approach, responding with a slight sense of humour. Not everyone likes this, but you may be surprised by how Siri's answers!

Siri doesn't always get what you're saying, but the software adapts to your voice over time – and it's thrilling when it works perfectly. It feels like having a conversation with a computer from the future. Take a look at some of the things you can say to Siri...

When Siri works perfectly, it feels like you're conversing with a computer from the future

VISUAL GUIDE | GET TO KNOW SIRI



Introduce yourself to your assistant and discover how the Siri interface works

Press to speak

1 Press and hold the Home button to access Siri. The iPad's screen fades out and it makes a 'ba-ding' noise. Simply start speaking, and when you're done Siri will make a 'bi-ding' noise and act on your words. These sounds help you know when it's your turn to speak. You can access Siri from anywhere on your iPad, and when you're done you'll go back to whatever app you were using.

Tap to open

2 When you ask Siri for information from an app, such as the weather, you can tap on its response to be taken to that app for more detailed information. You can also ask Siri to open an app just by saying the app's name – "Angry Birds", for example.

Tap to Edit

3 If Siri slightly misheard you then press where it says Tap To Edit. This brings up the keyboard so you can correct Siri's mistake. This is useful when you're creating a note, a reminder, a message or an email, and Siri doesn't quite get the words right. It also saves you having to say everything again just to fix one or two little things.

The Siri icon

4 Tap the Siri icon at the bottom to let Siri know you're about to start speaking again. When Siri is listening, an oscillating waveform is displayed as you speak.

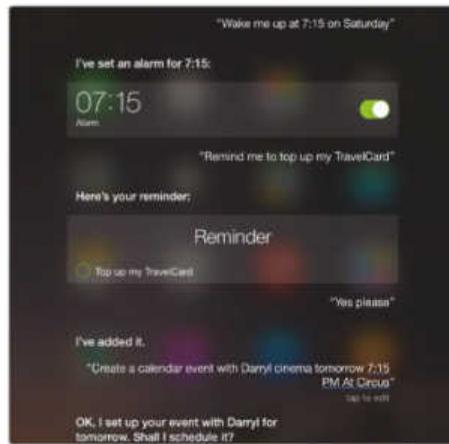
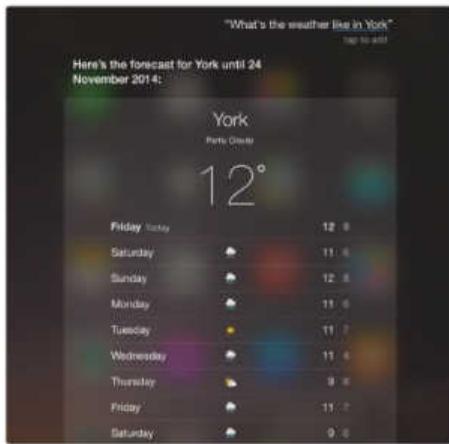
Words on the screen

5 Simply speak commands and see what happens. What Siri thinks you've said appears on the screen even as you continue talking. Keep the Home button held down until you're finished and then release it. Siri will think about what you've said and then issue a reply.

Interactive elements

6 Some elements of Siri's responses are interactive. You can ask Siri to show reminders, and then tap them to mark as completed; or you can ask Siri what alarm times you have set, and then tap to turn them on or off.

HOW TO | GET STARTED WITH SIRI



1 Get started

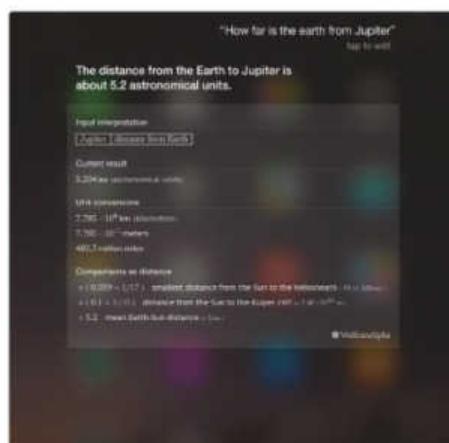
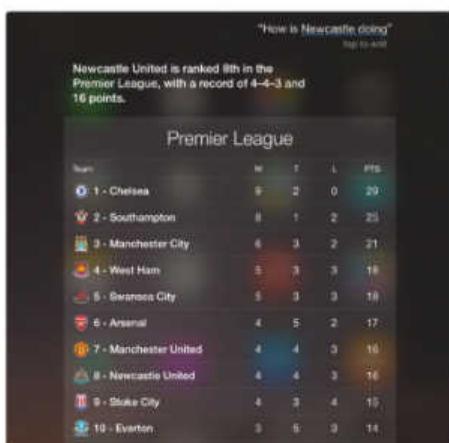
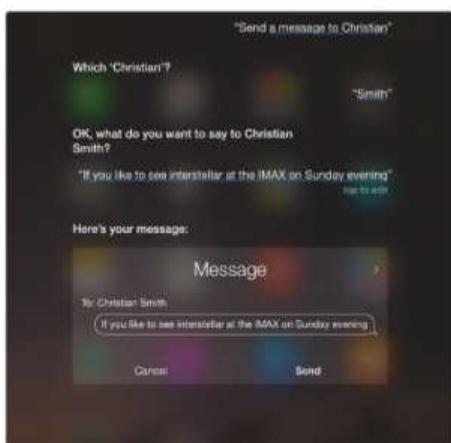
Hold down the Home button to activate Siri. After you hear the 'ba-ding' noise, speak out an instruction. If you're unsure what to say, tap the question mark at the bottom left for examples. Your iPad must be connected to the internet for Siri to work. When you've finished, release the Home button. Alternatively, if your iPad is connected to a power supply, just say "Hey Siri" and carry on speaking. This method can be disabled in Settings > General > Siri.

2 How's the weather?

A good place to start is with the weather. You can say to Siri: "How's the weather?" for a quick update, or ask something more specific like: "What's the weather going to be like on Wednesday?"; you can also ask for weather in specific places: "How's the weather in Barcelona?" You can even ask questions like "Is it going to rain tomorrow?" or "What time is sunset today?" After Siri has replied, tap the Siri icon at the bottom if you need to speak to it again.

3 Your personal assistant

Once you've got to grips with asking simple questions about the weather, it's easy to start doing a few more complex tasks. Try asking Siri to set an alarm: "Wake me up at 7 o'clock tomorrow", for example, or say "Set a timer for 20 minutes" to do a timer countdown. You can also ask Siri to remind you to do something at a certain time, or create calendar events. Or you can ask Siri to take a note for you; simply dictate the words and Siri will store it in the Notes app.



4 Send a message

Tell Siri to "Send a message to Jane", for example, to start composing a message. If you know more than one Jane, Siri will ask which one you meant but, over time, if you pick the same Jane it'll default to that person. Siri asks you to dictate the message, and checks you're happy with its transcription. Tap Send. If you ask Siri to send a message to your mother, say, it will ask you to identify the correct contact and memorises the relationship for future use.

5 Sports results

Siri is plugged in to all kinds of different online services. You can ask Siri to get you detailed sports information. Say "How is Tottenham Hotspur doing?" and you'll get information on the latest match results. Siri knows Premier League football in the UK, along with baseball, ice hockey and American football in the USA. There's no cricket or Formula One information yet, sadly, but it's still a great tool for keen sports fans.

6 Other information

You can ask Siri all kinds of information, such as "How far is Earth from Jupiter?" and "What is the capital of Zimbabwe?" Because Siri uses Wolfram Alpha (an online knowledge engine), it's great at answering all kinds of facts and doing mathematical equations. Siri also uses the Bing search engine which offers up a great selection of web results and can be used to find images. Just say "Show me pictures of wallabies" and you'll get some, er, pictures of wallabies...

NEXT STEPS | Siri

Get proactive suggestions

Apple's virtual personal assistant is smarter than ever. Here's how...

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9,
internet connection



Apple has made some major changes to Siri in iOS 9, making it smarter and more useful than ever. It now searches a wider range of sources to bring you even more reliable information – and

Apple has now made Siri a key part of your Spotlight search experience. On the Home screen, swipe downwards or right and you'll be taken to the Spotlight search page, which is populated with Siri Suggestions. These can be anything from recent contacts or your most frequently used apps to local news and amenities – including restaurants, bars and more. Some of Siri's suggestions only appear after using iOS 9 for a while, so chances are you will be pleasantly surprised by what

appears. Note that if you swipe down to open Spotlight, it doesn't display the full range of suggestions; instead it shows the keyboard so you can type immediately. Swipe left when you want to see every suggestion Siri has in mind.

Also new in iOS 9 are proactive suggestions, a Siri-powered feature which learns and then predicts what you're likely to want to do next. If you frequently email the same people at work, say, this will automatically suggest them when you start typing into the 'To' field in Mail. The same thing happens with commonly used event names in Calendar. The feature even recognises events in Mail and adds them to your schedule. Let's look at what else proactive suggestions can do for you...

VISUAL GUIDE | GET TO KNOW SIRI



iOS 9's Spotlight Search uses Siri to predict what you'd like to do next

Search bar

Swipe right from the Home screen's first page and you'll find iOS 9's brand-new Spotlight Search screen, which now includes Siri Suggestions. At the top is the search bar, which is also Siri-powered. In fact, if you tap the microphone icon on the right you'll be able to speak your search query instead of typing it.

Suggestions at the top of the page to disable the feature.

People

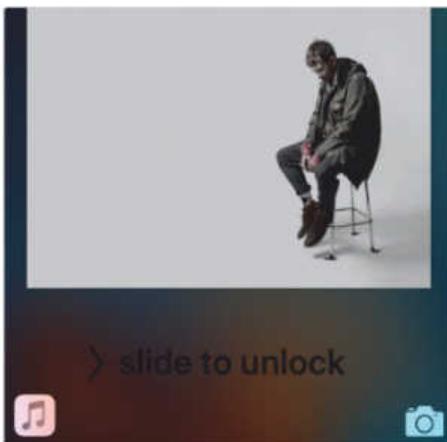
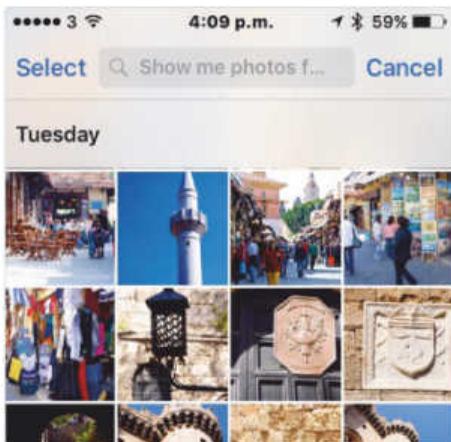
Tapping on the picture or name of anyone in your Siri Suggestions list automatically reveals all the different ways that you can contact them – by phone, message, email, etc. Tapping on any icon allows you to contact them using the relevant app. Or you can tap on the 'i' icon to be taken to their entry in Contacts.

Apps

You can also tap on any app listed under Siri Suggestions to instantly open it. You can search for other installed apps on your iPhone by typing in the search bar.

News

Siri suggests four News app story results by default, but you can see more by tapping the 'Show More' option on the right. Tapping on any story immediately takes you to the relevant news page within the News app.

HOW TO | USE INTELLIGENT SEARCH**1 Show off your photos**

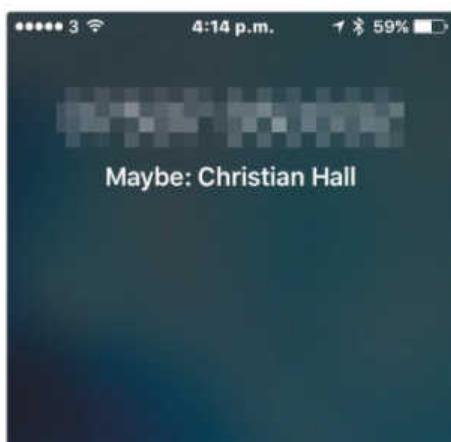
Fancy showing a friend or relative your holiday photos? You can find and show them off in a snap using Siri. Simply say "Show me photos from [a location]" followed by a phrase like "in July" and Siri will automatically perform a search in the Photos app on your iPad and present the relevant images to you. Note that how accurate the results are will depend on how your photos are tagged – with relevant date and GPS location data, for example.

2 Play some music

iOS 9's proactive suggestions are one step ahead when it comes to helping you use your iPad more efficiently. Plug in a pair of headphones, for example, and you'll notice that the Music or Podcasts icon will appear in the bottom left corner of your iPad's Lock screen. Swipe upwards from the icon to be taken to your lastly played playlist of podcast. Or just press Play on the Lock screen controls. This works with CarPlay and Bluetooth devices too.

3 Get better results

Siri powers Spotlight searches so you get more intelligent results every time. Type in 'weather', for example, and Siri will show the current conditions in your location, any relevant apps you have installed, suggested weather websites and even relevant news items. Siri will even suggest relevant song titles, emails, names from Contacts, Wikipedia entries and even Bing results. You can narrow down the results by being more specific, of course.

**4 Send a group email**

If you regularly send emails to the same bunch of workmates or friends, Siri can lift some of the burden off your shoulders. Start typing the first person's or second person's name in to the 'To:' field in Mail, for example, and Siri will automatically suggest other people you may like to add, based on your previous interactions with them. You can also send invitations to meetings using Calendar, and Siri will suggest potential invitees this way too.

5 Smart reminders

As we explained on page 96, Siri is handy for creating all kinds of reminders and to-dos, but in iOS 9 it's smarter than ever. If you set a travel time when adding an item to Calendar, Siri will check traffic conditions ahead of time and remind you to leave earlier than you had planned. You can also use Siri to ask you to stop off at certain locations on your journey – handy if you need to head to the shops on your way home from work.

6 Who's calling?

If you're using Continuity to receive iPhone calls on your iPad (see page 162), Siri will attempt to identify unknown incoming callers. It will automatically rifle through your emails and see if it can join the dots together by marrying a number up with previous contact details you've received, even if you're unaware of them. And if someone sends you an email with their contact details in, they will automatically be added to Contacts so you'll have them to hand next time.

Use Spotlight to find things

Intelligently find things with the built-in Spotlight Search feature

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9

Few features in iOS change the way you use an iPad as radically as learning to use Spotlight, Apple's one-stop shop for finding anything on your device. Accessing it is easy: to reveal the Spotlight Search bar, just swipe a finger down from the middle of the Home screen (or in practice, from anywhere below the top edge of the screen) or swipe right on the first Home screen of apps on your iPad.

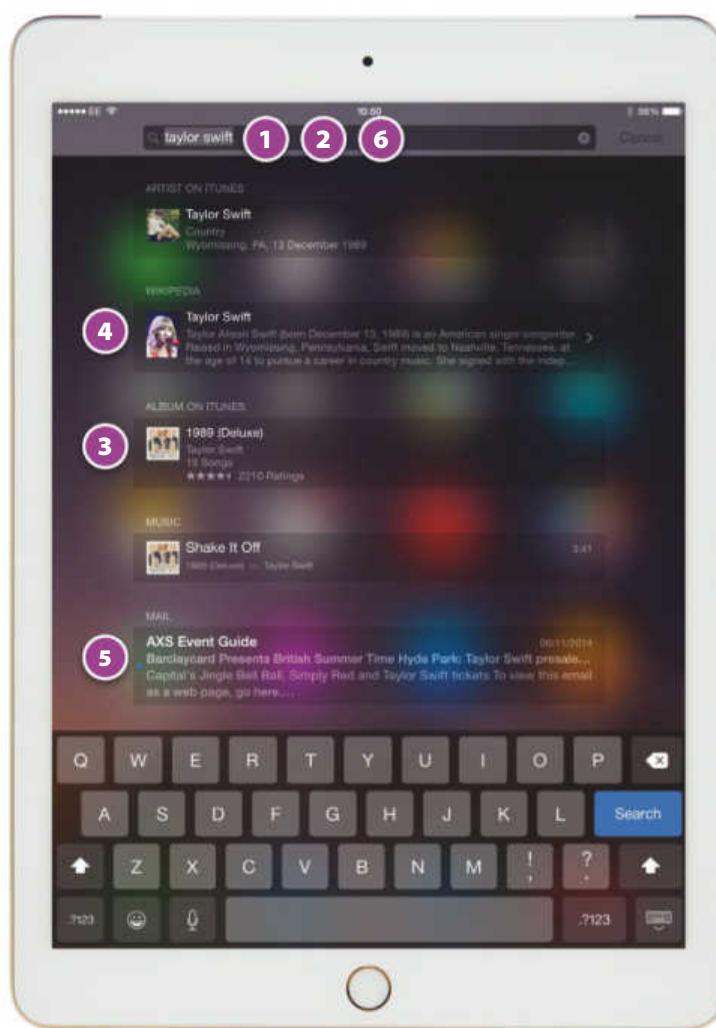
You can search for all kinds of things using Spotlight, and it's the sheer range of

options available that makes Spotlight so impressive. As well as the obvious things – Contacts, Music, Mail and Messages – you can also search for apps, videos, notes, events and reminders on your iPad. In iOS 9 you get results from the internet: along with your iPad content you get Wikipedia results, movies, music and apps, and web pages. Also, Siri is on hand with pre-search suggestions for apps, contacts, locations and more, before you've started typing.

Spotlight is more powerful than ever in iOS 9, so let's take it for a spin.

You can search for all kinds of things, and it's the sheer range that makes it so impressive

VISUAL GUIDE | SPOTLIGHT SEARCH



Find just about anything with your iPad

Search

1 From the middle of the Home screen, swipe one finger downwards to reveal the Spotlight Search bar and below it, some Siri suggestions. Enter what you're looking for into this box. Spotlight displays results below as soon as you start to enter text, so you might not need to type a full word.

Apps

2 One of the handiest features of Spotlight is that it can search for installed apps if Siri's suggestions haven't helped. Using Spotlight is often faster than hunting for an app's icon, and can help if you've a cluttered display.

Media

3 Spotlight can find songs and movies in the Music or Videos apps, and it also returns songs and movies from the iTunes Store. This is a great way to discover a new music track, app or movie, but if you don't want to see them, turn off Spotlight Suggestions in Settings > General > Spotlight Search.

Wikipedia

4 Spotlight is integrated with this popular encyclopaedia. When you enter a search term, Spotlight may show a matching entry for that term from Wikipedia. Tap the item to read a summary within Spotlight; a link is provided to open the full entry in Safari.

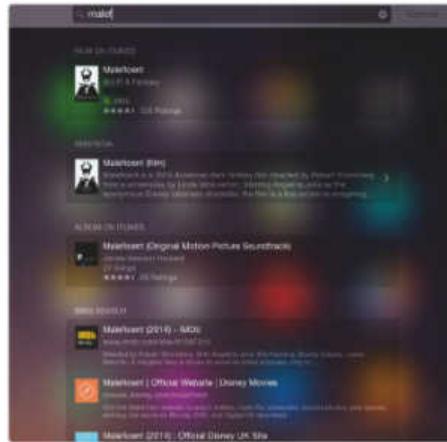
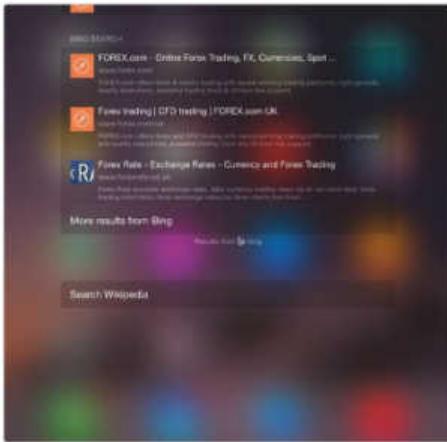
Mail

5 Spotlight searches the information stored in your iPad's core apps, such as Mail, Contacts, Reminders and Calendar. You can search for the text inside messages, for example, as well as subject headers and senders.

Web results

6 Spotlight returns web pages from Bing (you may need to activate Bing Web Results in Settings > General > Spotlight Search). At the bottom of Spotlight's search results, you'll find Search Web and Search Wikipedia options. These open Safari and search for whatever you typed using your chosen search engine or Wikipedia.

HOW TO | FIND THINGS USING SPOTLIGHT



1 Access Spotlight

Place one finger in the middle of the

Home screen (not at the very top) and swipe downwards or swipe right on the very first Home screen (but not when you're in an open folder). If Siri's suggestions don't help, type in a search term, such as the name of a person or an app, or a keyword to find in an email or document. Results will appear as you type. If you see what you're looking for, tap the item to get more info or be taken to the app containing that content.

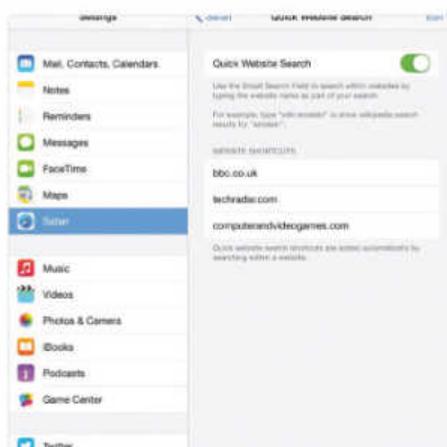
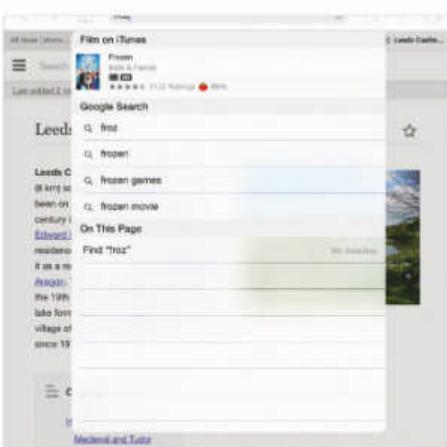
2 Searching the web

Spotlight finds information from the web. As you enter search terms, you'll see news stories from major sites such as the BBC, The Guardian, Daily Mail Online and Fox News under the News heading. Spotlight also returns links to websites. For example, if you search for Disney you get a direct link to disney.co.uk listed under Suggested Website. Other relevant web pages are listed under Bing Web Search. Tapping any of these items takes you to the page in Safari.

3 Spotlight Suggestions

One feature since iOS 8 is Spotlight

Suggestions. These link to apps, movies and music from the iTunes Store and the App Store. Type into Spotlight and you get links to iTunes songs and albums (along with ratings). Tapping one of these takes you to the appropriate store, where you can preview or purchase the item. Wikipedia pages are also included, and tapping one opens a summary inside Spotlight, and includes a link to read the whole article in Safari.



4 Spotlight settings

Spotlight's settings enable you to choose whether Siri suggestions appear and which types of results are displayed. Go to Settings > General > Spotlight Search to access these options. At the top of the menu is the option to turn Siri Suggestions on or off; use the slider to make your preference. Immediately below is a list of every installed app on your iPad with a similar accompanying slider to add or remove its content from Spotlight searches.

5 Spotlight and Safari

Spotlight and its suggestions aren't limited to the Home screen of the iPad; it also works in the Safari app. When you enter something into the Smart Search Field in Safari, it also returns Wikipedia results and relevant items in the App Store and iTunes Store. Some people find this a little much, and you can disable this functionality by going to Settings > Safari and flicking the Spotlight Suggestions switch to the Off position.

6 Quick Website Search

Safari's Quick Website Search feature

enables you to quickly search in a single site without having to browse to it. When you visit a website and use its built-in search engine for the first time, that site is added to a list of shortcuts (in Settings > Safari > Quick Website Search). Next time you want to search within that site, type its address and then your search terms; one of Safari's suggested results will be an item that looks only within that site.

Declutter your Home screen

It's easy to add more apps, but what about keeping them organised?



As we've seen, it's very easy to find more apps for whatever you want to do, and install them. However, if you find that you enjoy downloading and trying out new apps all the time then more and more Home screens will get added automatically to accommodate them. Things will quickly get rather cluttered, and it will become tricky to find your favourite apps when you want them.

Even if you stick with the built-in apps for some time to come, the most obvious way you can save yourself loads of time is by arranging your apps so that the ones you use most are always close to hand. So, if you love your social networks, put

Swipe downwards from the middle of any Home screen to display the search bar.



Facebook and Twitter on the first Home screen or in your Dock.

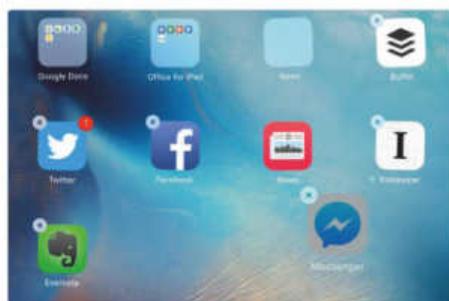
You might also want to think about using folders to group similar apps to reduce clutter, which helps you find them more quickly, just as you might on a Mac or PC. Here, we'll show you a few more ways to keep your workspace clear – because there are always more apps to try...

Two tips to note. First, if you've got multiple Home screens, tapping the Home button when viewing any of them takes you back to the first one, so you might want to include your most-used apps there. Second, if you do have a lot of apps installed, rummaging through them all won't be the fastest way to locate the one you want. Instead, on any Home screen, swipe downwards anywhere except the very top of the screen to type the name of the app you want into Spotlight Search (see page 100). Alternatively, say the app's name to Siri (see page 96) to have it open the app for you just by holding a button instead of typing on the screen.



Make the most of the Dock (at the foot of the Home screen) and folders to keep your apps in order.

HOW TO | ORGANISE YOUR APPS



1 Move and arrange

Want to arrange your apps in a different order? Tap and hold on any icon until they all start to jiggle. You can now drag any of them to a new position on the screen – the others will slide out of its way. When you're done with any procedure on these pages that leaves the icons jiggling, press the Home button.



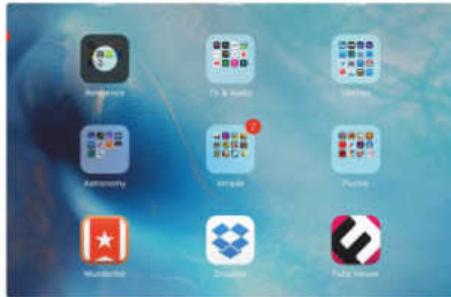
2 Multiple screens

Newly installed apps automatically get added on a second page of the Home screen (or a later one if that's full). The tiny 'lights' above the Dock at the foot of the screen indicate how many screens there are and which of them you're currently looking at. To see the next one, just swipe one finger across the screen.



3 Move between screens

To move an app to another screen, tap and hold an icon as in step 1, then drag it to the edge of the screen. After a brief pause, the next screen will slide into view. You can have up to 15 Home screens. To create a new Home screen, drag an icon to the right-hand edge of the last screen and hold it there for a moment.



4 Dock your favourites

Want to keep some apps on hand at all times? The Dock at the foot of the screen can hold up to six favourite apps, and stays the same on every one of your Home screens. To make room in it, tap and hold as before, then drag an icon out of it; to add an app, tap and hold its icon, then drag it to the Dock.



5 Creating folders

You can also organise apps into folders. To create a folder, tap and hold an icon to start the icons jiggling, like in step 1, then drag one icon on top of another. The folder will be given a name based on the apps' genres; to rename it, start the icons jiggling, tap the folder to open it, then its name field, and type a new name.



6 Using folders

If a folder contains apps that show alerts on their icons (such as Mail, which shows the number of unread messages), the alert will also appear on the folder's icon. To access the items in a folder, tap the folder to open it, then tap the app you want. To close the folder, tap the screen outside it or press the Home button.

DELETE AN APP



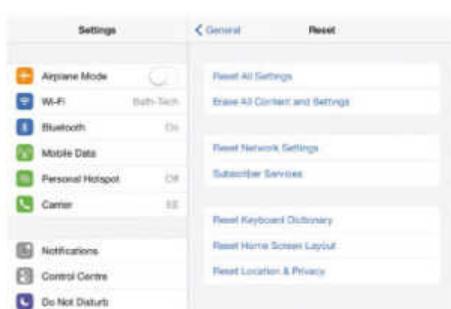
To delete an app, tap and hold on any icon until they all jiggle, then tap the X in the top-left corner of the unwanted app's icon. (The built-in apps can't be deleted.) To delete a folder, drag all the contents out of it – it will be deleted automatically when it's empty, as will empty Home screens.

7 Modifying folders

Just like the Home screen, the items in a folder can be organised across several pages. To add more apps to a folder, start the icons jiggling, then drag the icons you want onto it; to remove items, start them jiggling, open the folder, and then simply drag icons out and drop them onto the Home screen.

8 Folders in the Dock

You can even add folders to your Dock, not just individual apps, so you can have whole groups of apps accessible from every Home screen. Note, though, that you must create the folder first and then drag it to the Dock – if you try to drag icons on top of anything already in the Dock, they will just slide out of the way.



9 Work in iTunes

Organising things can feel fiddly on your iPad, but you can also do it on your computer. Connect your iPad to the computer and open iTunes. Click the iPad icon (top-left), then click Apps on the left. Here you can drag the Home screen previews to reorder them, and double-click a screen or folder to manage its contents.

10 Managing screens

For larger previews, drag the scale slider above the Home screens to the right. To move apps between Home screens, drag their icons between the previews. To add a new Home screen or a new page in a folder, click + to the right. When finished, click the Apply button (bottom-right) to commit your changes.

11 Undoing & resetting

If you get in a muddle or want to undo a change, your options are limited. If you go to Settings > General > Reset and tap Reset Home Screen Layout, this restores the Home Screen to its original layout – but it also removes all folders you've created and applies the default wallpaper to your Home screen(s).

Free up storage space

Make room on your iPad for new apps and media

SKILL LEVEL

Anyone can do it

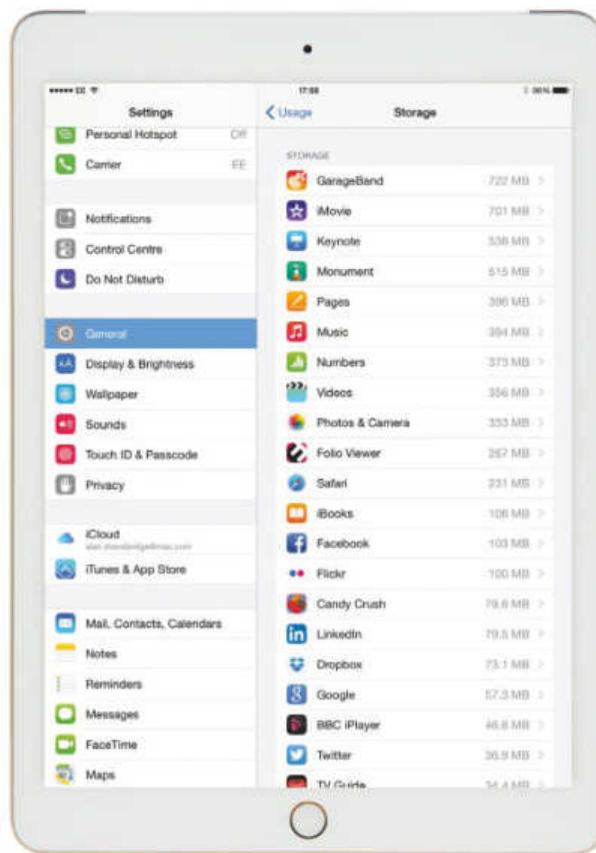
IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9

The Settings app identifies the space hogs eating into your valuable storage space.



No matter what capacity iPad you have, there will come a time when you'll find there's not enough space for a movie or big new game that you want to add. The good news is that you can clear apps, photos, videos and other items off your device at any time. The bad news is that it isn't always obvious how to delete various kinds of items, and different methods are needed for different items.

It's easy to find out what's taking up space on your iPad. Go to Settings > General > Usage. Look under Storage to see what's used, and tap Manage Storage for a breakdown. Need to free up space? Let's look at the options.

Deleting an app

Your installed apps are listed in descending order of size. Tap one to see how much space the app itself takes up and how much is being used to store its

data and documents. Except in the case of built-in apps, which can't be deleted, you can tap Delete App to reclaim all this space.

You can also delete apps from your Home screen: tap and hold on an icon until they all start to jiggle, then tap the X on an icon to delete that app. The effect is exactly the same either way.

Whichever method you use, bear in mind that deleting an app will also delete its saved documents and data. You can redownload any app purchased from the App Store, free of charge, but this won't restore its data – you'll need to connect it to iCloud (if it uses that) or use an iTunes backup for that.

Delete videos

Video files can be huge, so it makes sense to delete any you've watched or don't want. In the Videos app, tap Films, TV Programmes or Music Videos at the top of the screen, then tap Edit at top-right, and tap the X on the unwanted item. To delete individual episodes of a TV show instead, tap the show's artwork, then swipe to the left across an episode in the list and tap the Delete button that appears. Note that if you delete a rented movie, it's gone for good. If you delete any other video file, it's removed from your iPad but remains in the iTunes library on your computer (if you synced it from there in the first place), and will be added back to your iPad next time you sync unless you tell iTunes not to.

Delete photos

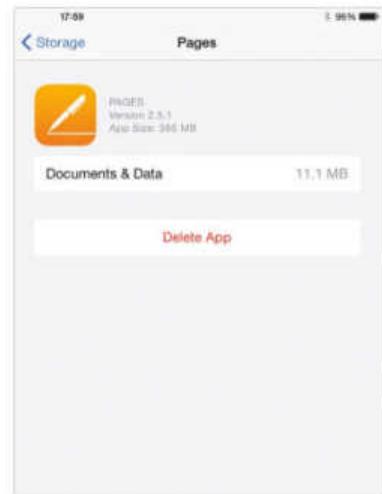
By default, every photo and video you take on your iPad is saved into the Photos app, and uploaded to your iCloud Photo Library. This library is an online copy of all the photos and videos you've taken with your iOS devices or imported into the Photos app on your Mac – at least if you've enabled the feature on those devices as well. See page 124 for more about iCloud Photo Library, but in the first instance you can free up some space by telling your iPad to store photos at a reduced quality. In Settings > iCloud > Photos & Camera, select Optimise iPad Storage. This doesn't affect the full-quality originals



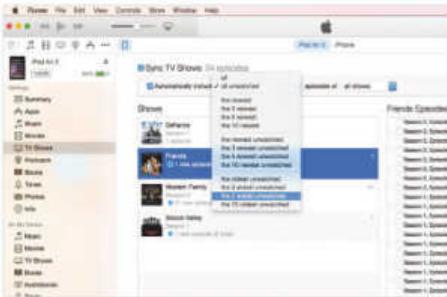
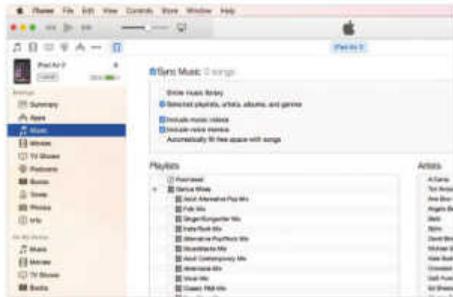
In Settings, some apps reveal a detailed breakdown of all the content that's taking up storage space.

that are stored in the online copy of your library – only the copies of photos on your device are affected.

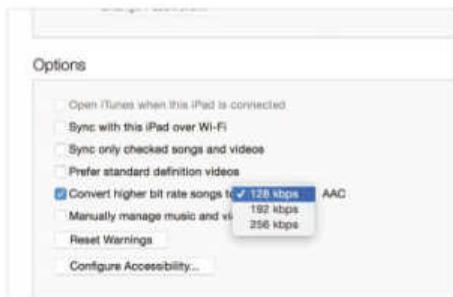
If you have turned on iCloud Photo Library, be careful about deleting photos from your iPad because they will be deleted from any other iOS devices and Macs on which you have enabled it. When managing your photos and videos to remove poor ones to free up storage space – both on your device and in your online iCloud storage – if you accidentally delete some that you wanted to keep, they can be recovered for the next few days. Tap Albums >



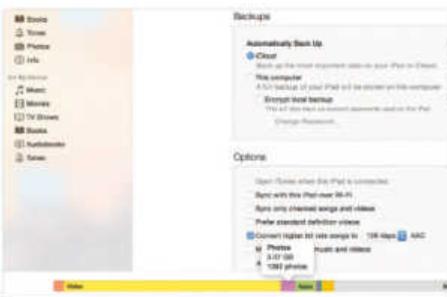
Deleting apps also removes their data from your iPad, so ensure you have a backup somewhere.

HOW TO | MANAGE SPACE ON YOUR iPAD USING iTUNES**1 Control the music**

If you manage your iPad using iTunes on your computer and your music library is set to sync to your device in its entirety, do you really want all that content on there? If not, go to the Music category and, under Sync Music, switch to 'Selected playlists, artists, albums, and genres'.

**2 Manage other media**

Also consider turning off 'Automatically fill free space with songs'. Now turn to the other media categories to tweak their settings. Under the Movies and TV Shows categories, you can specify that only unwatched items to be synced to your iPad, or limit shows to a few episodes.

**4 Make songs smaller**

You can choose to sync music at a lower quality. In the Summary page, under the Options heading, tick 'Convert higher bit rate songs to...' and select an option in the menu. A lower bit rate means less space taken up, yet the sound quality should still be acceptable.

5 Assess the results

As you make changes to what's synced to your iPad, the coloured capacity bar at the foot of the iTunes window updates in real time to show you how much space will be free. When you're happy, click Apply to commit the changes you've made to your device, then press Sync.

3 Clear unwanted apps

Click Apps in the sidebar and, in the pop-up menu at the top-left of the list, select Sort by Size to see the largest apps first. Apps with an adjacent Remove button are already on your device. Press it for any large apps you can do without and the button will say 'Will Remove'.

**AUTO DOWNLOAD**

If space is short on your iPad, go to Settings > iTunes & App Store and disable automatic download of apps, music and books bought using other devices. Tap Purchased in the store apps to download only what you want on your iPad.

Recently Deleted, then Select at the top-right, then the items you want and, finally, Recover.

Delete a song

The best place to see what music is stored on your iPad, especially if you've enabled iCloud Music Library (see page 78), is Settings > General > Usage > Manage Storage (under the Storage heading) > Music. This shows music stored locally that you've synced from iTunes on a computer or downloaded from the iTunes Store. Occupied space is shown by artist name, which you can tap to see a more detailed breakdown by album and then track list. Swipe

leftwards on any of these items, or All Songs at the top of the list, and then tap the Delete button that is revealed. If you're subscribed to Apple Music or iTunes Match and the tracks you want to delete have been added to your iCloud Music Library, you can easily download them again in the Music app. iOS caches music that you stream rather than download for offline listening. Storage used by streamed tracks is managed by iOS if it's needed for something else.

Magazines and books

Interactive magazines can take up a huge amount of space. To delete all issues of a magazine, simply delete its



To delete a book in iBooks, tap Select, then the item, followed by Delete.

container app from the Home screen by tapping and holding until it starts to jiggle, then tap the X that appears at the icon's top corner. Look inside magazine apps for a way to delete individual issues – this process can differ between publications.

Confusingly, items in the iBooks app are deleted differently. Tap Select, then tap items to remove, then tap Delete.

Restore items

Remember that you can restore your previous app and media purchases from the iTunes, iBooks and App Stores by tapping Purchased in the bottom bar of the respective apps.

The basics of iCloud

Back up your iPad and sync with other devices via Apple's servers

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9

Photos, calendars, songs, messages, contacts, ebooks and much more can be synced to all your devices, wirelessly and seamlessly.



Do you use an iPhone in addition to your iPad? Are you also using a Mac or a Windows PC? In any of

these cases, or even if you're using just an iPad on its own, you can make use of iCloud, Apple's free cloud-based sync, backup and file storage service.

To put it simply, iCloud enables you to sync documents created in Pages and other apps, plus your photos, contacts, calendars and various kinds of data – to the cloud. This means they're all stored on Apple's online servers and are then available on your compatible devices.

How does it work? First, you need to be using the latest versions of iOS and OS X (and there's also a handy Windows

desktop tool and iCloud control panel if you use a PC instead of a Mac – find it at http://bit.ly/win_icloud). To sign up for the service, you'll need an Apple ID.

Then you simply enable iCloud and choose which types of files and data you want to sync: contacts, calendars, reminders, notes, bookmarks, mail account settings (your email messages too, if you opt to set up an iCloud Mail account) and more. Now instead of backing up to your Mac or PC via iTunes, your iPad will sync with iCloud over Wi-Fi, even if you plug it into your computer using a cable.

Getting into sync

Part of the service is iTunes in the Cloud, which enables you to wirelessly download all your purchased iTunes music and movies to any or all of your devices. The same goes for App Store and iBook Store purchases.

Next is iCloud Photo Library, which stores the full-quality original of any photo you take with your iOS devices or import into the Photos app on your Mac. All of your photos then automatically become available on any of your devices without you having to think about connecting your iPad to your Mac

with a cable to sync photos to or from it. If space is tight on any of your devices, they can be set individually to store lower quality versions of your photos without affecting the originals in iCloud.

You can sync bookmarks from Safari between all your devices. Similarly, items in Safari's Reading List are also synced to all of your iOS devices and Macs linked to the same iCloud account. iCloud also keeps track of the tabs you have open in Safari on each of your devices, and lets you pick up where you left off on whichever of your devices you're using.

iCloud can even sync playback: if you start to play a movie, TV show, podcast or audio book on one device and then pick up another, it will resume from the point where you left off on the first device. This works for content bought or rented from Apple, and also for your home videos.

Finally, there's iCloud Drive. You get 5GB of space for free, which is used for backing up your documents and data (but your music, apps and other purchases don't count towards the quota). You can pay to get more online storage space to the tune of 50GB, 200GB or 1TB, costing 79p, £2.49 and £6.99 per month, respectively.



HOW TO | SHARE VIA iCLOUD



1 Share photos

In the Photos app, you can create a shared album. Once people accept your invitation to it, they can view it, comment and, if you allow it, they can add their own photos. A shared album can be made accessible in a web browser to anyone who has the address.

2 Share calendars

In the Calendar app, tap Calendars at the foot of the screen, tap the 'i' beside a calendar, and then tap Add Person to invite someone to share the calendar. Scroll down and switch on Public for a link to email to anyone you want to be able to view (but not edit) the calendar.

3 Share documents

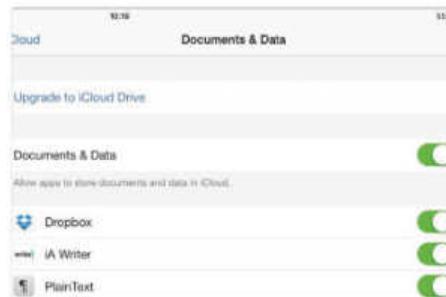
Versions of Pages, Numbers and Keynote are available at icloud.com for you to open and edit your files from any computer. You can share links to documents to work collaboratively. The apps can also convert between iWork, Microsoft Office and PDF formats on upload or download.

HOW TO | MASTER iCLOUD BACKUP



1 iCloud settings

Tap Settings > iCloud and, if you didn't enable iCloud during setup, you can do so now. Decide which iCloud services you want to switch on. Choosing Mail won't sync all the email accounts you may access via the Mail app, only your free @icloud.com account.



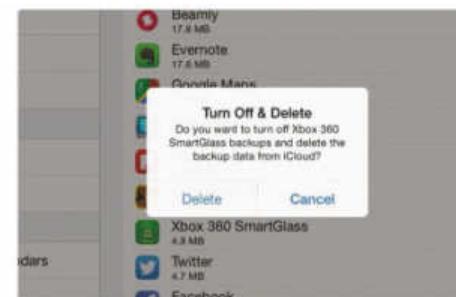
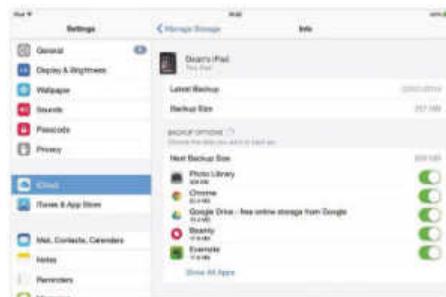
2 Documents & Data

Tap Documents & Data to enable your apps to use iCloud to store documents you create and other data such as saved games (you must not have used iCloud Drive yet). You can also choose whether it uses a Mobile (cellular) connection if Wi-Fi is not available.



3 Storage & backup

To enable iCloud Backup, tap Backup and switch on the feature. Your iPhone will no longer sync and back up automatically to iTunes. Instead, it will back up to iCloud when it's locked, and connected to Wi-Fi and mains power. You can back up manually from here.



4 Buy More Storage?

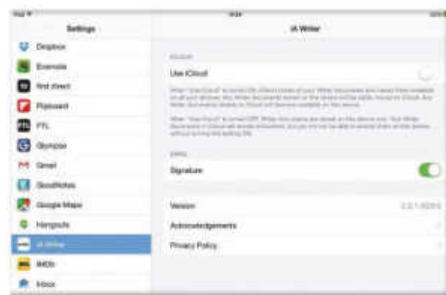
Tap iCloud > Storage > Buy More Storage or Change Storage Plan. You get 5GB for free; if you need more, tap to select a new tariff (pay monthly) under 'Choose Upgrade'. An extra 50GB (making 55GB in total, including your initial free 5GB) is just 79p per month.

5 Or optimise first

But do you really need more? On the Manage Storage screen you'll see your devices that use iCloud Backup, as well as a summary of data being stored in iCloud. Tap the name of your iPad to see a breakdown of what data from the device is being backed up to iCloud.

6 Specify backups

To save space and stop backing up items you don't really need, you can turn each app's backup on or off. Tap Show All Apps to see smaller apps. iOS apps store user data internally, so Photos contains all the photos you've shot, iBooks all the books you've bought, and so on.



7 Other devices

You can't view this level of detail for devices other than the one you're using, but you can see when they were last backed up and how big their backups are. You can delete backups, but think carefully before doing so, especially about other devices!

8 Activate apps

If you're using iMovie, Pages, Numbers or Keynote, be sure to scroll down in Settings, tap each one and enable iCloud there as well. This enables them to save your documents to iCloud, making them accessible at icloud.com and keeping them synced between your devices.

SAFARI TAB SYNCING

If you use Safari on iOS and Mac, you can sync open pages across all your devices, as long as each is connected to the internet and signed into your iCloud account. In Safari on your iPad, tap the two overlapping squares (top-right) and scroll down to see your iCloud Tabs.

Using iCloud Drive

iCloud Drive enables you to access your files across devices

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9, an iCloud account and apps that can save to iCloud Drive



hen you sign into an iCloud account on your iPad, your device is able to sync data such as Safari bookmarks, the keychain that contains your website usernames and passwords, calendars, reminders and contacts to the cloud – and from there to your other devices. This works in reverse too, so any changes you make on another Apple device, or by signing in to icloud.com, are synced to all of your devices, including your iPad. It isn't just the more minor pieces of data that are kept in sync, though.

iCloud is also able to store documents, just as you would on a drive attached to your Mac, enabling you to update those files wherever you have access to an app that can open them, and keeping them in sync between devices, too. For example, you might enter data in a spreadsheet in Numbers on your iPad. As long as that iPad has been able to connect to the internet (and the same is true of the device you switch to), you can be assured that the spreadsheet will be available on, say, your Mac. So you can write up a report about your data later on if you like.

Since the introduction of iOS 8 and OS X Yosemite, Apple has changed the way in which documents are stored and browsed in iCloud. The old system, called Documents in the Cloud, provided strictly separated areas for each app's files. Its replacement, iCloud Drive, is far more flexible, as it works much like the Finder in OS X.

iCloud Drive can store documents from different apps in the same folder, and you can nest folders inside each other so that things are organised exactly as you want them to be. iCloud Drive retains the previous system's tagging feature, which enables you to assign keywords to files and then search for them instead of filenames.

We'll show you how to enable iCloud Drive, but this comes with a word of caution: if you need to access documents stored in iCloud on a Mac that is unable to run OS X Yosemite or later, you should refrain from enabling iCloud Drive and stick with the old system. When you do, files that you stored in the old Documents in the Cloud system won't be kept in sync on older versions of OS X. The same is true if any of your iOS devices are not yet running iOS 8 or later.

HOW TO | SET UP iCLOUD DRIVE



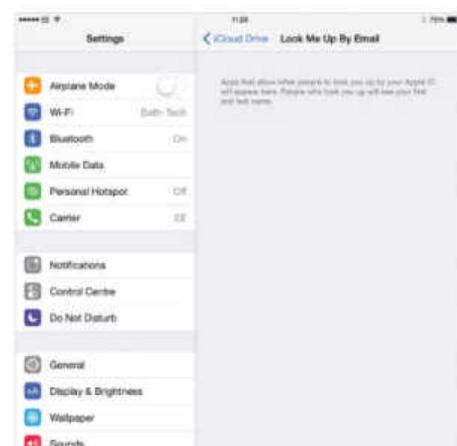
1 Enable iCloud Drive

When setting up your new iPad or upgrading an older device to iOS 9, you had a choice to turn on iCloud Drive. If you didn't at the time, you can change your mind by going to Settings > iCloud > iCloud Drive and turning it on. If your Mac can't run OS X Yosemite or later, migrating to iCloud Drive means your Mac won't be able to automatically sync files or access them in the Finder, but you can manually store and retrieve them through icloud.com.



2 Control your storage

After iCloud Drive is turned on, the same page in Settings shows a list of apps that are able to save to it. Each has a switch next to it that can be turned off if you don't want an app to use space – you may want to prevent an image editor taking up lots of room. Below the list of apps is a global switch that can be flicked to prevent all apps using the mobile network (on iPads equipped with that type of connection), restricting them to Wi-Fi.

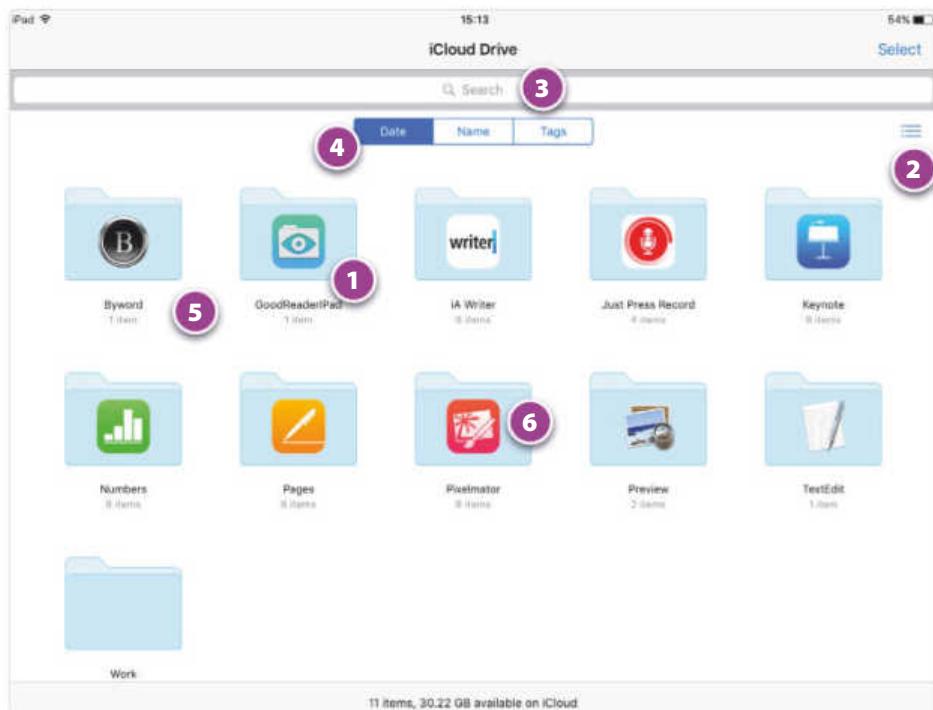


3 Look up iCloud users

Above the list of iCloud Drive enabled apps is an item labelled 'Look Me Up By Email'. Apps can provide a means of looking up other iCloud Drive users – perhaps because they want to collaborate with you. However, you don't have to allow this. When you tap that item, you'll be taken to a page that lists apps with this capability, giving you control over exactly which individual apps can find you in this way using your email address.

VISUAL GUIDE | iCLOUD DRIVE'S DOCUMENT PICKER

Here's how to browse files that you've saved to iCloud Drive



1 Browsing

Apps that are capable of saving documents to iCloud Drive present a Document Picker – like this one in Good Reader – for managing them. It works like Finder on the Mac and File Explorer in Windows, and it differs from the Documents in the Cloud system available in older versions of iOS because folders can be nested within other folders, and files from different apps can be stored together by project or by whatever abstraction makes sense to you.

4 Sorting files and folders

When at the top of a folder, swipe downwards to pull a group of three buttons into view. These allow the folder's contents to be sorted by the date they were last modified, newest first; or alphabetically, with A at the top (you can't tap again to reverse the order, and unfortunately there's no alphabetical index like the one in the Music app to jump through); or you can sort by tags you might have added when saving the file.

2 Different views

At the top-right corner of the Document Picker is a button made up of three lines. Tap it and the default presentation – files and folders in a grid of icons – switches to a list view, with icons displayed smaller in a left column and folder names to their right. In both, folders display the number of items at the next level down, but folders inside them may contain many more items. As you tap into folders, the picker stays in your selected view.

5 Folders created by apps

Some folders in iCloud Drive will display an app's icon because that app has created the folder. Unlike Documents in the Cloud – the predecessor of iCloud Drive featured in iOS 7 – you aren't restricted to storing everything from a single app in the same folder. If you have documents from Pages, Numbers and Keynote that are related, for example, you can keep them all neatly together in a single project folder.

3 Search for something

When you tap the search bar, the view changes to an empty list and the keyboard slides into view. Start typing something and the list will be filled with matching files found anywhere in your iCloud Drive – not just in the current folder. The same controls for sorting files and folders that are available when browsing are also available here. Note that what you type is looked for in file and folder names, but not file contents.

6 Browse folders

Folders on iCloud Drive work just as they do on your Mac or in Windows. Simply tap one to browse its contents. If you like to organise your work by putting folders inside other folders, don't pay too much attention to the item count next to each one, which indicates how many items are in the next level down, rather than being a cumulative total of everything that's inside the folder. You'll have to open the folder for a more complete picture of what's inside it.

Set up iCloud Keychain

How to use Apple's online password service

SKILL LEVEL

Taking things further

IT WILL TAKE

20 minutes

YOU'LL NEED

iPad, iOS 9, Apple ID, iCloud account, and optionally another iOS device, or a Mac running OS X Mavericks or later



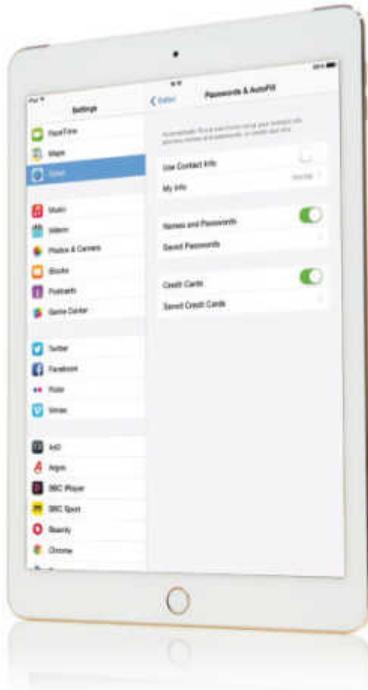
Sometimes it seems like every website you visit requires you to sign up. This means you have to come up with a strong password – one that's long and complex enough to be hard to crack or guess. Remembering many strong passwords can be tricky.

Tempting though it may be, it's not safe to use the same password for lots of sites. Writing down passwords is also a huge security risk, which is where iCloud Keychain steps in. You can save many different passwords to a keychain

that's stored in your iCloud account; the keychain is accessible only on devices on which you sign in with your basic account credentials and then clear a security process to grant access to your keychain's contents on that device.

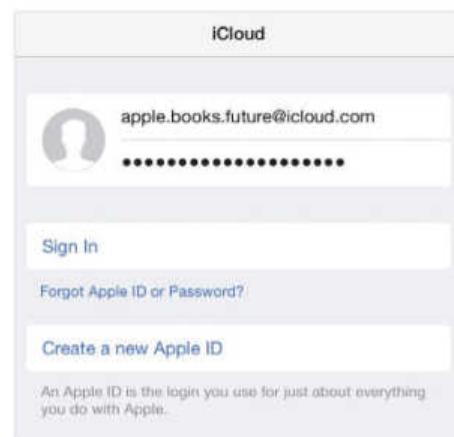
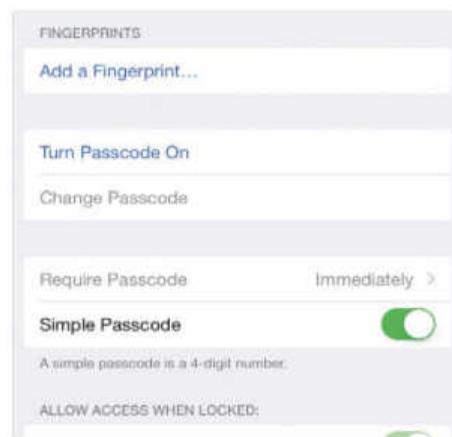
Keychain remembers all saved details and fills them in for you when required. It keeps login details and passwords in sync across all your authorised devices. So if you sign up to a website on your Mac, you'll be able to sign in to that site more quickly next time you access it from your iPad or iPhone.

With iCloud Keychain, a single tap of AutoFill enters any login information and password you've saved. So you can more easily use discrete, complex passwords on each site you visit – and iOS can even suggest one for you.



Don't write passwords down or use the same password everywhere – let iCloud Keychain save them for you

HOW TO | SET UP iCLOUD KEYCHAIN ON YOUR iPAD



1 Setting up a passcode

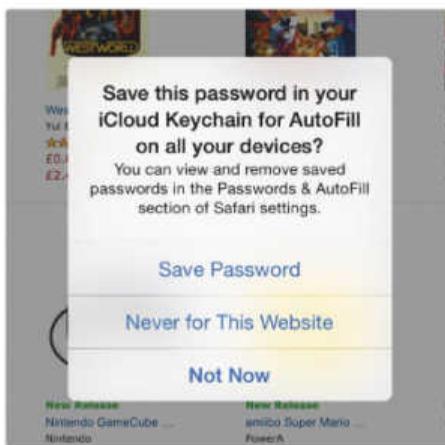
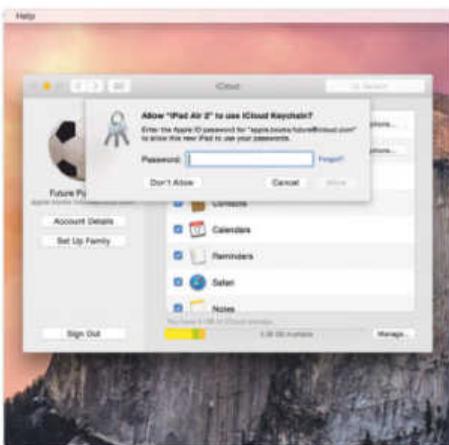
You should protect your iPad – and hence your keychain – with a passcode. This code will be needed to access your iPad, and to manage information in iCloud Keychain. Tap Settings > Touch ID & Passcode > Turn Passcode On. Enter a four-digit code, then repeat it to verify your choice. Below that setting, Require Passcode sets a duration before your passcode is required after the iPad locks itself (Settings > General > Auto-Lock) or you put it to sleep.

2 Signing into iCloud

iCloud Keychain stores account credentials for websites and credit card details online, so you'll need to have created an Apple ID and signed in with it under Settings > iCloud. Your iPad will ask if you want iCloud to make use of the device's location. This isn't needed by Keychain, but it enables the valuable Find My iPad service. iCloud should now be up and running on your iPad, but keychain requires some extra steps before it'll start working.

3 Set up iCloud Keychain

Most iCloud features are switched on by default, but Keychain is one that requires manual activation. Tap Settings > iCloud > Keychain and turn on the switch next to iCloud Keychain. The iPad will now request your Apple ID's password; enter it and then tap OK. If you've already set up Keychain on another Apple device linked to the same iCloud account, you'll need to approve your iPad from that device, or provide the security code you set during that process.

HOW TO | SET UP iCLOUD KEYCHAIN ON YOUR iPAD (CONTINUED)**4 Approve access**

If you opt to approve access to your keychain using another device, you'll receive a notification on it. On a Mac, click View on the notification to open System Preferences' iCloud pane, then click Details next to the Keychain item. Enter the password for your Apple ID and click Allow. Alternatively, when the notification appears on your other iOS device, enter your password and then tap Allow to grant access.

5 Save password details

Ensure Settings > Safari > Passwords & AutoFill > Names and Passwords is on. In Safari, go to a page that requires you to sign in. Submit your details. You're given the option to save them, but you can opt not to, either for now (perhaps you're changing them) or never. With iCloud Keychain enabled, the credentials are synced to your authorised devices and you won't have to type them. (When creating an account, 'Suggest password' appears above the keyboard.)

6 Automatic passwords

You're able to fill in credentials saved to your keychain using any device you've chosen to authorise to use it. On your iOS devices, when you tap on a form to provide credentials, an AutoFill Password button appears at the top-left of the keyboard. Tap that and your username and password will be inserted in their respective fields for you, and you only need to tap the form's button to submit the details and sign in.

**7 Credit card details**

Bank card details can be stored when Settings > Safari > Passwords & AutoFill > Credit Cards is turned on. When you submit card details to a website, Safari asks whether to remember them. As a precaution, the security code isn't saved. Cards can also be added manually in Passwords & AutoFill under Saved Credit Cards > Add Credit Card. Either type the details or tap Use Camera to capture them from the card's front. Enter a description to identify the card.

8 Manage passwords

You can manage passwords in your keychain under Settings > Safari > Passwords & AutoFill. Tap Saved Passwords and enter your iPad's passcode. Tap an item to view the website address and your username and password. To remove several passwords from the list, tap the Edit button, then the unwanted passcodes, and finally tap Delete to remove them. To remove one quickly, swipe from right to left across it and tap the Delete button that appears.

9 Adding information

AutoFill can use your details (from the card labelled as 'Me' in the Contacts app) to fill in online forms. In Safari's Passwords & AutoFill settings, if your name is already next to My Info, just turn on the Use Contact Info switch. Otherwise, tap My Info, find your name in the list, and then tap it to identify it as you. The Use Contact Info option will be enabled after you do this. In a form, tap a field and then tap AutoFill at the top of the keyboard to insert your details.

When to use iCloud.com

Find out how to recover deleted files, set up email rules and much more

SKILL LEVEL

Could be tricky

IT WILL TAKE

30 minutes

YOU'LL NEED

A Mac or PC, an internet connection, an iCloud account



Over the years, it's been pretty clear that Apple loves the web. However, it doesn't

want you to live in a web browser – and this is a distinction that's quite important. An exception of sorts is icloud.com. This website is Apple's browser-based app suite, the majority of which mirrors apps on your iPad. This means that wherever you have access to a Mac or PC with a compatible web browser (<http://apple.co/1K7jWdz>) a Mac or PC, you can also use web-based versions of Mail, Contacts, Calendar, Photos, Notes, Reminders, and Apple's trio of office apps (Pages, Numbers and Keynote, all labelled as 'beta' versions). There are also

three utilities on offer: iCloud Drive, Find My iPhone and Settings.

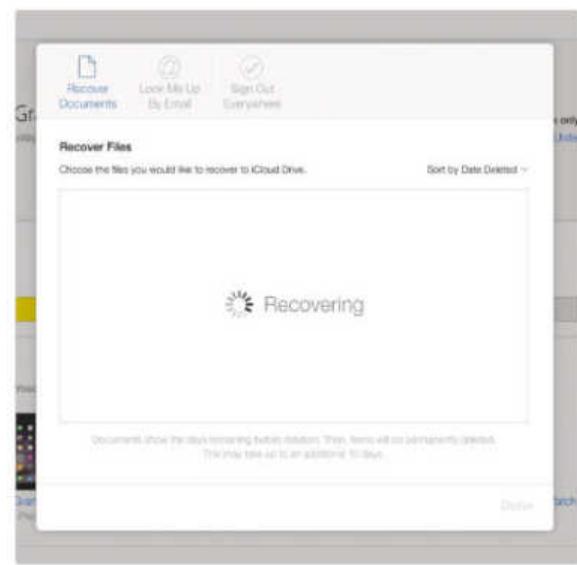
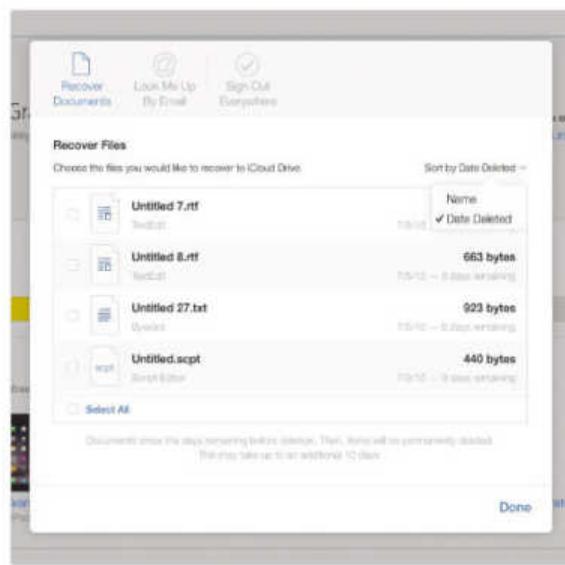
Although we wouldn't especially recommend using the site regularly (that is, over the native apps), we'd say it has two specific purposes. First, it's a handy emergency place for performing tasks: checking email if your iPad's out of power, or finding a device if it goes missing. Secondly, it has a number of useful settings and configuration options that aren't accessible on your iPad, and some of these are the subject of our walkthroughs. Note that you can access the site from your iPad, but the options you have are limited, so we've assumed you have access to a Mac or PC for these walkthroughs.



HOW TO | RECOVER DELETED DOCUMENTS

TOOL SCHOOL

If you've left yourself signed into icloud.com on a computer you no longer have access to, sign in elsewhere and click Settings > Data & Security then Sign Out Everywhere. Click Sign out of all browsers, to confirm your choice.



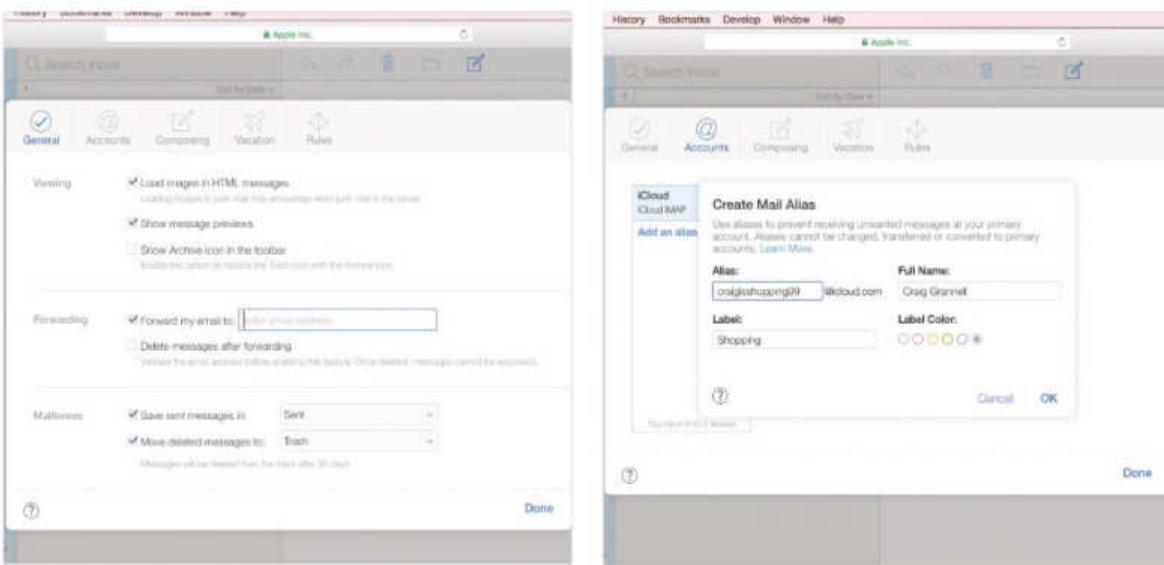
1 Find recoverable documents

One of the most frustrating things about using any device is when you accidentally delete a file you didn't mean to. If that happens to a file you have stored on iCloud Drive, icloud.com makes it easy to get it back. To find it, log in, select Settings and click Data & Security. Click Recover Documents and sort your files by date or name.

2 Get back deleted files

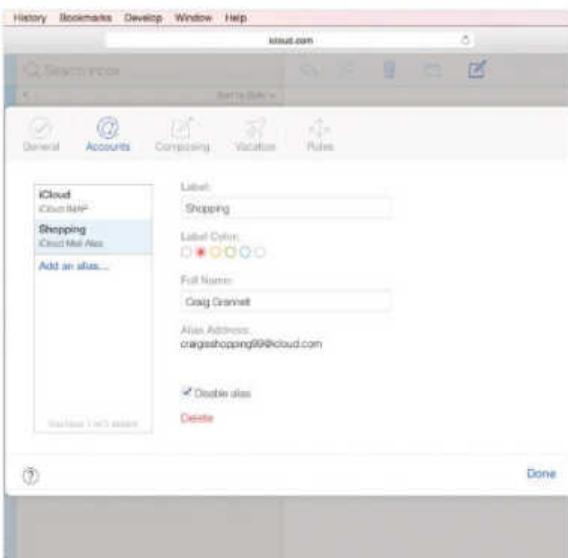
If it's a file you just deleted, date is the best option. Items are sorted oldest to newest, so scroll to the bottom of the list. Choose the item you'd like to recover by clicking its checkbox, then select Recover File. To see if it has worked, head to the iCloud Drive app on icloud.com, and look inside the folder where the file was previously stored.

HOW TO | POWER UP MAIL AT iCLOUD.COM



1 Forward emails

Open Mail in icloud.com and click the cog icon at the bottom-left corner. Select Preferences from the pop-up menu to see your options. In Forwarding, click the first checkbox and enter an email address. This will forward emails sent to your icloud.com email to wherever you specify. You can delete forwarded messages by ticking the second checkbox.

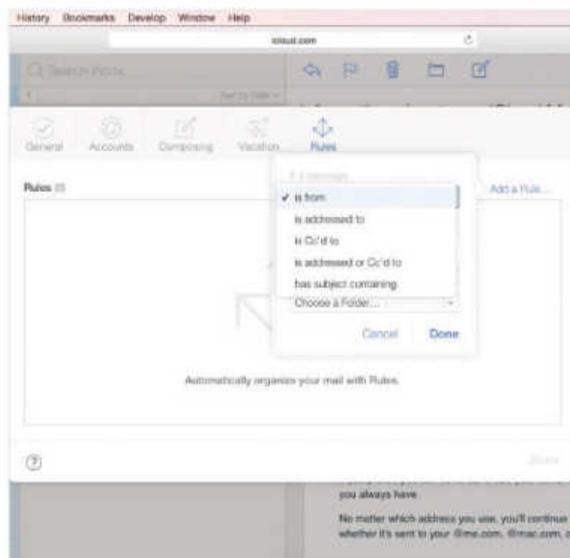


3 Manage email aliases

In the Accounts section of Mail's preferences, aliases are listed in the left sidebar. You can have up to three aliases at once. To manage one, select it; you can then update the label and label colour, and the associated name. If the alias isn't in use, you can disable it by ticking its checkbox. If you decide you no longer want it at all, click Delete to remove it.

2 Create email aliases

Aliases are secondary email addresses that shield your main icloud.com account from spam. You can use an alias for online shopping and other web activities, and it can be disabled when you don't need it. In Accounts, click 'Add an alias', add your alias, and, optionally, a label and label colour. Click OK. If the alias is not available, pick one that is.



4 Create server-side rules

In the Rules section of Mail's preferences, you can define rules to automatically organise your email. Click 'Add a Rule', and use the pop-up menu to select a condition and action; click Done to confirm. In the Rules list, the 'i' button enables you to update or delete the rule. If you're going away, click the Vacation tab instead and set an auto-reply.

USE THE DESKTOP SITE ON iPAD



It is sort-of possible to use the desktop icloud.com site on iPad. Tap the address field and then pull the shortcuts sheet down.

Now tap 'Request Desktop Site'. The site will reload with the layout you see on a Mac or PC. Note, though, that some aspects of it won't work well or at all.

JARGON BUSTER

Lost your device or had it stolen? As long as it had Find My iPhone running you'll be able to check its whereabouts on icloud.com. Open Find My iPhone and click All Devices. If the device is online, click it to zoom to its location.



None



Mono



Tonal



Color

Cancel

Photography & Video

With so many features, your iPad camera is a genuine photographic tool

- 116 The Camera app**
Get to know the built-in app for taking photos
- 118 The Camera app in-depth**
Zoom in on all the features of the Camera app
- 120 Get to know the Photos app**
How to get your shots on show
- 122 Editing your photos**
Adjust your shots and add effects in Photos
- 124 Store your snaps in the cloud**
Back up photos using Apple's iCloud system
- 126 Record a time-lapse video**
Condense footage into more thrilling video
- 128 Video editing in iMovie**
Turn your footage into a blockbuster movie!



The Camera app

Get to know all the features of the built-in Camera app

1 Switch cameras

Your iPad has two cameras: a more powerful five- or eight-megapixel iSight one on the back, and a more basic 1.2-megapixel FaceTime one on the front. To switch between them, just tap this icon. The rear camera will give better results, and features such as the Panorama mode can be used only with the rear camera. Both cameras feature face detection, though, to make sure that people are properly focused and exposed for in your shots.

2 Timer

Tap this button to bring up the timer function. It's fairly limited in settings (you can choose to delay taking a shot only by 3 or 10 seconds), which should give you time to position yourself in the frame.

3 HDR mode

To activate High Dynamic Range (HDR) mode, tap this button. (There's more about HDR mode on page 118.) When it's off, the text is white; when it's active, it's yellow. When you take an HDR shot, the camera is slower and needs extra time to process the image, so make sure you turn it off for when you need to take quick shots.

Burst mode

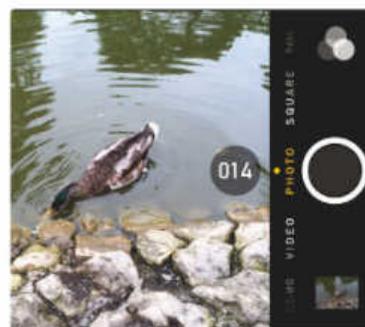
The iPad Air 2 and iPad mini 4 offer a burst mode, meaning that if you hold the shutter button down instead of just tapping it once, the camera will keep taking photos at a very fast speed – many pictures every second – with a little counter in the viewfinder telling you how many it's taken. Once you've shot them, you can review each batch of photos to pick out the best one to keep, though your device will analyse them and select the best for you. It's easy to then delete all the ones you don't want in one tap, so they're not taking up space.

4 Flash (iPhone only)

Tap this icon to bring up the different options for the flash on an iPhone. You can choose to have it on Auto mode, where it will fire only if your device detects that it's dark enough to need flash; you can force the flash on, so that it fires every time you take a photo, which can help fill deeply-shadowed areas, particularly in backlit subjects; and you can turn the flash off, so that it never fires. The flash on the iPhone 6 and 6 Plus will automatically adjust itself to match the colour temperature of the room you're shooting in; other devices have just a single-colour flash.

5 The viewfinder

Most of the screen space in the Camera app is devoted to letting you see what you're shooting. Tap anywhere on the screen to set a point for the focus and exposure, or if you're taking a photo of people, you can let the face detection and autofocus do this for you – any faces that it identifies will be highlighted with a yellow box. You can zoom by spreading two fingers apart on the screen, but this is only a digital zoom, not optical, which means it's just enlarging an area of the frame and so it will reduce the quality of your photo.



The many photos taken by burst mode will inevitably take up space, yet it takes just seconds to delete surplus shots you don't want to keep.

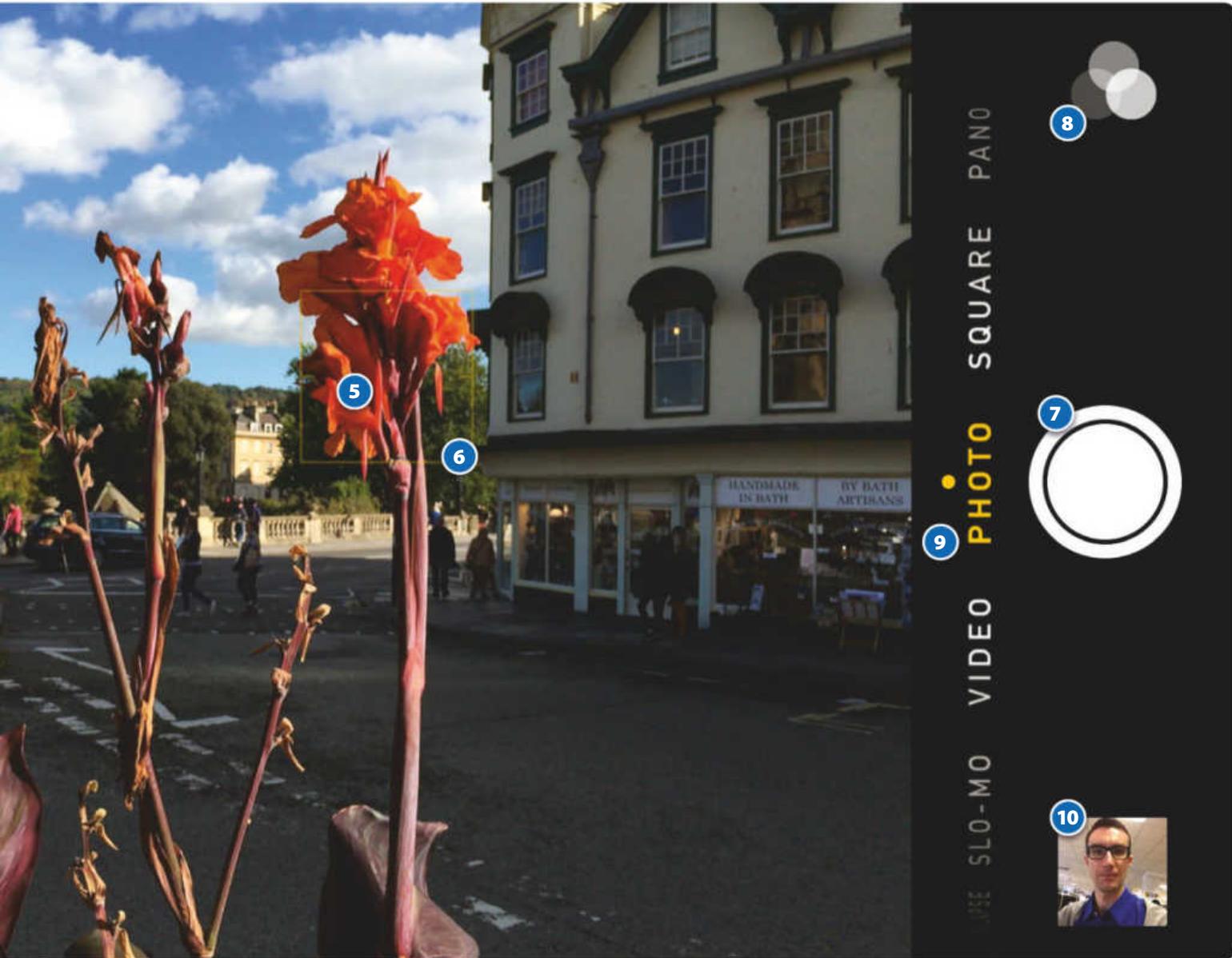


6 Exposure controls

Once the focus is set, you can drag your finger up or down on the screen to manually adjust the exposure level of the shot, making it brighter or darker as needed. This can be a little fiddly to get right at first – make sure that you swipe pretty much immediately after placing your finger on the screen, so that you don't accidentally refocus instead.

9 Shooting mode

Swipe across the list of camera modes to switch between them. Photo mode is normal shooting; Square takes square photos; Panorama mode enables you to take super-wide photos; Video mode is normal video recording; Slo-Mo mode takes video at very high speed; and Time Lapse takes a series of photos over time and turns them into a video.



7 The shutter button

Tap this to take a photo! If you're in video mode or Time Lapse mode, this appears red, so it's easy to see if you're about to accidentally record video instead of take a quick snap. Hold your finger on the shutter button to activate burst mode, which will keep taking photos at a rate of 10 per second as long as you hold it down.

8 Filters

On an iPhone, tap this icon to apply a filter live in the viewfinder. (On an iPad, you can retrospectively add them in the Photos app.) This shows you a grid of filter thumbnails, with a live view from the camera in each. Tap an effect you like to see it in the viewfinder. See page 119 for more information about filters.

Shooting shortcuts

Here are a couple of handy shortcuts in the Camera app. First, when you want to get snapping fast, you can jump to the Camera app from the Lock screen by swiping the camera icon in the bottom-right corner upwards.

Instead of using the on-screen shutter button to take a photo, you can also press the volume up button on the side of your device. If you're using earphones that have inline controls, you can even take a shot by pressing the volume up button on the cable.

CAMERA APP | IN DEPTH

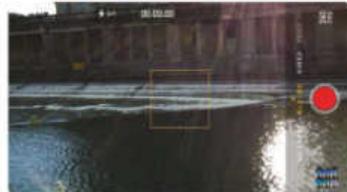
Find out more about the Camera app's special features and options

Shooting Mode

There are six camera modes you can choose from on the iPad Air 2, iPad mini 4, iPhone 6 and 6 Plus. The Photo mode takes simple pictures in wide or tall format (depending on which way round you hold the device). Tap the shutter button to take photos, or hold it down to take multiple photos continuously.

The Square mode behaves just like the Photo mode, but it takes photos in a square shape instead of rectangular. This is great for Instagram users.

Video mode records video, naturally, at 1080p Full HD quality when using the rear camera, and at 720p when using the front-facing one. Slo-Mo mode records video at high speed, so that it can then be played back dramatically slowed down. On the iPad Air 2, this is fixed at 120fps (compared to Video mode's 30fps), but you can toggle between that and 240fps on an iPhone by tapping where the frame rate is shown in the corner of the screen.



Panorama displays an arrow that you must try to keep steady as you turn the camera to take a picture of a sweeping vista. Time-Lapse mode shoots photos automatically over time, then stitches them together into a movie.

Time-Lapse

Time-Lapse photography lets you see things that normally take a long time to happen, but condensed into a much shorter duration. Classic examples are of flowers opening from buds or clouds rolling across the sky – all visible in just a few seconds. In iOS 9, there's an option for recording Time-Lapse footage in the main Camera app. To use it at its best, you'll want to set your phone up somewhere stationary (perhaps even with a tripod and mount). Switch to the Time-Lapse mode, press the red shutter button and the iPhone will take photos automatically – just stop it when what you want to record has finished. It then adds all the photos together into a movie, animating the whole time period you recorded into just a few seconds of footage.



HDR

High dynamic range images are created by taking three shots – one at high exposure, one at low exposure, and one in the middle – then combining them to create an image that has more detail than is possible to capture in one shot. The idea is that the results look more like how our eyes see things than cameras do, with much more nuance. Your device's HDR mode does all this work for you, snapping the exposures it needs and then combining them. This means that taking an HDR photo is slightly slower than a normal photo, but the results can be superb.

A low exposure shot is taken to capture detail in the highlights. Anything in shadow will be too dark to make out, but detail in bright areas and lights will be much more distinct.



A high exposure shot captures the details in the shadows. Any bright areas will be severely blown out, but detail in those areas has been captured in the low-exposure shot...



The shots are then blended with a midtone exposure shot, so you get maximum possible detail in both the bright and shadowed areas; impossible to capture in a single photo normally.



Panorama

Panorama mode in iOS is simple to use. Select this mode, hold your device upright (in portrait, not landscape) and aim it where you want your panorama to start. In the middle of the screen, you'll see an arrow in a box. This tells you which direction to move your device – if you want to take a panorama in the other direction, tap the arrow. To begin, tap the shutter button, then slowly move your device in



the direction of the arrow. Try to keep the arrow on the line in the middle. When the arrow reaches the end of the box, you've reached the maximum panorama size – if you want to stop shooting before that, tap the shutter again. Your device captures lots

of images as you move it, and stitches them together almost instantly. If you're moving too fast for good results, it will warn you. Panoramas are saved to the Camera Roll alongside regular photos, and grouped in an album in the Photos app.

Filters

Photo filters are still hugely popular for sprucing up simple shots when sharing online, and those built into iOS can be really handy. You have eight options (in addition to 'none'), ranging from simple black-and-white in Mono, to high-contrast mono shots with Noir, to analogue effects in Process and Instant. To access the filters, just tap the symbol with three overlapping circles in the Camera app, or after tapping Edit in the Photos app. You'll see the camera's view live in all nine filter options; simply tap one to make it fullscreen. The icon with the three circles will switch from black-and-white to colour, to remind you that you're using a filter.

You're not stuck with any filter you applied at the time of taking a shot; it is applied 'non-destructively' to the image. That way, you can open the image in Photos, tap Edit, then tap the filters icon, and remove the filter or even apply a different one at any time in the future.



Image Stabilisation

Most shots taken with an iOS device tend to be handheld. For this reason the iPhone's camera includes clever image stabilisation, to reduce blur in the images from your hands shaking involuntarily. This even includes taking several pictures whenever you press the shutter and combining the best parts into one final image.

The iPhone 6 Plus has an extra weapon, too: optical image stabilisation. It detects your hand movement using the M8 processor, then physically moves the camera sensor to counteract it, keeping the lens still overall. This activates only in low-light conditions, though.



IOS PHOTOGRAPHY | TECHNIQUES

Six top tips to help you take even better photos with your iOS device

Y

our iPad has a camera as good as many compact digital cameras on the market but, like any camera, it will give you best results if you know how to get the best from it.

1 Master the shutter

The shutter releases as soon as you press the button on-screen, not when you lift your finger off it. If you tap and hold, the camera will keep taking shots until you lift your finger.

2 Lock focus/exposure

We've mentioned that you can tap on the screen to set the focus. To *lock* the focus to that point, so that you can

recompose the shot, tap and hold instead of just tapping: the yellow rectangle will pulse to confirm. You can then swipe to adjust exposure, and it will lock to the level to which you set it.

3 Clean the lens

iPads spend a lot of time getting greasy fingers on them and being shoved into

If you have time to compose, keep an eye on the horizon, and turn the grid on to keep things level



Autoexposure has left the horses and carriage in this shot too dark. Swiping up enables us to boost the exposure, making the horses much more visible (though blowing out the horizon and sky somewhat).



grubby bags. Before snapping a special moment, take a second to check the lens is clean.

4 Zoom using your feet

Avoid the 'zoom' on your iOS device – it's a digital, not optical zoom, so all it's doing is blowing up a small part of your photo before you take it. You might as well shoot at full quality and crop more carefully afterwards. Instead, if at all possible, just get closer to your subject.

5 Hold still!

Unless you want arty effects, aim to minimise blurring in your photos. Don't jab hard at the shutter button. Avoid shooting while walking – come to a halt first. Tuck your elbows in against your body; take a deep breath, then exhale gently and steadily as you tap the shutter button. If you're shaky or shooting in low light, brace yourself against a solid object such as a tree or wall or, better still, use a tripod.

6 Watch the horizon

It's all too easy to take off-kilter shots, especially if you're shooting from the hip to capture the moment. If you have the time to compose your shot, keep an eye on the horizon, and turn on the grid (in Settings > Photos & Camera) to help you keep things level. You can fix tilted shots in the Photos app, though.

Get to know the Photos app

Image organising, sharing and editing made easy

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



There's an old saying in photography that the best camera is the one you happen to have with you, and indeed the internet is filled with all kinds of snaps that people have taken on their tablets wherever they were and whatever they were doing. But taking photos with your iPad is just the start...

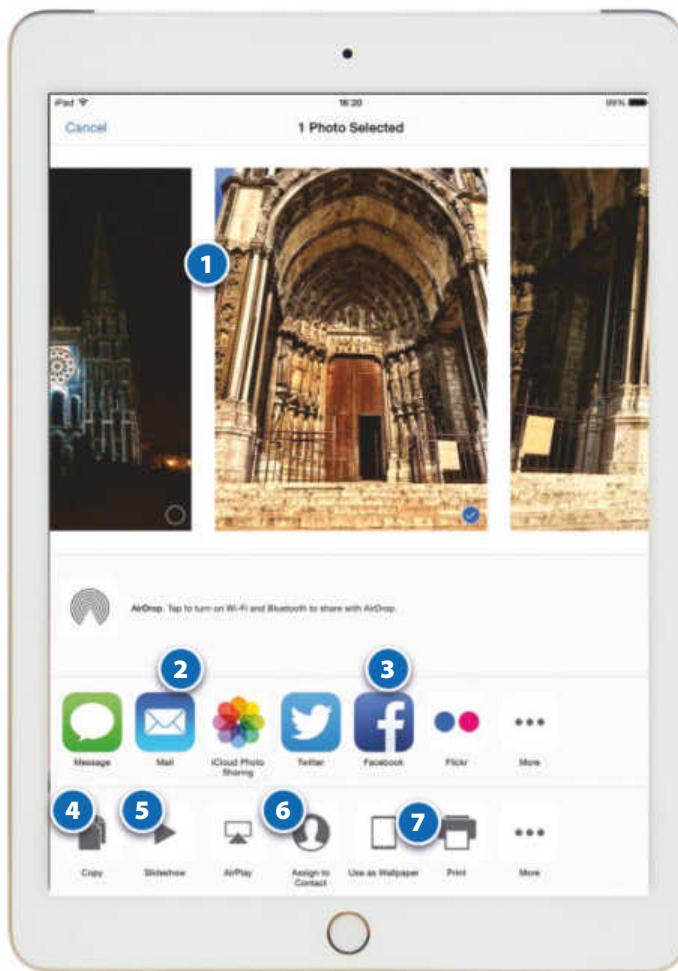
Luckily, your iPad comes with the Photos app. It not only enables you to view your snaps and organise them in albums, but it automatically organises your photos into Moments. This means that, if you're taking lots of pictures using the camera on your iPad, it becomes easier to find exactly the ones you want when it comes to reviewing, editing or sharing your photos at a later date. From Moments, you can move out to

Collections (shots taken in roughly the same place over a longer period), then to Years. Tap on part of the Year to zoom in again to a Collection, then tap again to go to a Moment within it. Next to each Moment is a Share button which gives you the option to share the entire Moment or select images within it to share. Tap on an individual photo if you want to view it, edit it or share just that single image.

The Photos app also includes a range of powerful editing tools that are a cinch to use. You can quickly crop a picture to get rid of unwanted details; apply eye-catching filters; adjust brightness, exposure or colour saturation; or simply wave – or rather, tap – a magic wand to instantly improve the tonal qualities of an image. Here's an overview of the basics...

VISUAL GUIDE | SHARING FROM PHOTOS

The Photos app has all the options you need for great pics



Select photos

1 When you're viewing a single image, tap the Share icon (the box with an arrow pointing out of it) at the bottom-left to get to this sharing screen. If you want to select more photos, swipe the strip of shots at the top to the left or right, then tap the circle at bottom right of the image to select it. If you tap Share in Moments view, then Share Some Photos, you can pick multiple shots to share by tapping on each one you want – indicated by a tick in a blue circle.

Messaging

2 As well as using AirDrop (see page 156), you can directly share your selected picture(s) via Message or email, or by uploading to iCloud Photo Sharing. Tapping the Mail button opens a new email message with the picture already added as an attachment. Simple!

Social media

3 You can also post to your accounts on social networks. Twitter enables you to write a tweet with your picture attached, while Facebook offers you choices about what to write, which album to upload to and who can see the photo. Choosing photo-sharing site Flickr lets you upload to specific sets too.

Copy

4 Tap here to copy the image to the clipboard. You can then paste the image into various default or third-party apps, such as email clients or photo editors.

Slideshow

5 If you want to show off a selection of your images, you can tell Photos to display a slideshow. The Slideshow button does this on the device itself, while the AirPlay button enables you to stream it to an AirPlay device, such as an Apple TV hooked up to a TV.

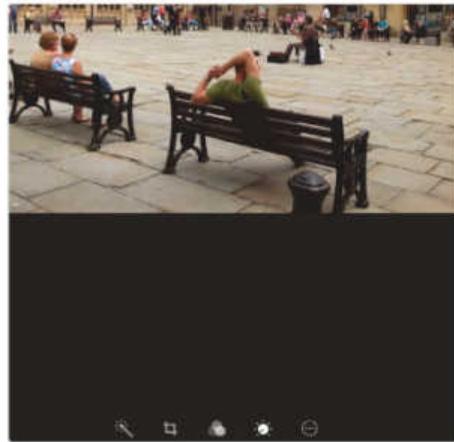
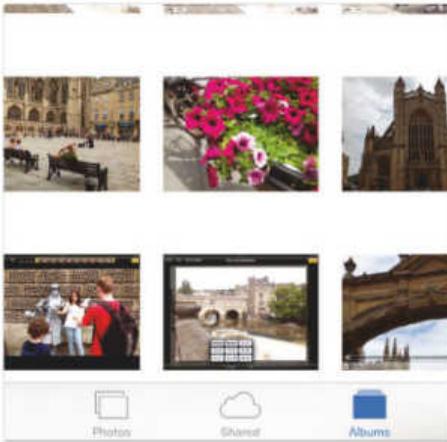
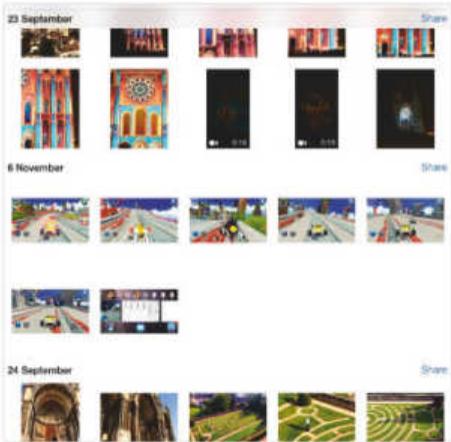
Assign to a contact

6 Tap to associate the selected photo with a person among your Contacts. You'll see that image when you make or receive a call.

Use as Wallpaper / Print

7 Tap here to make the selected photo the background image on your device. You can crop and scale the image and then set it as either your Home screen, the Lock screen, or both. Next to this option is a Print command. Tapping this enables you to choose from AirPrint-compatible printers on your local network, and to set the number of copies – see page 158.

HOW TO | ORGANISE YOUR iPAD SHOTS



1 Moments

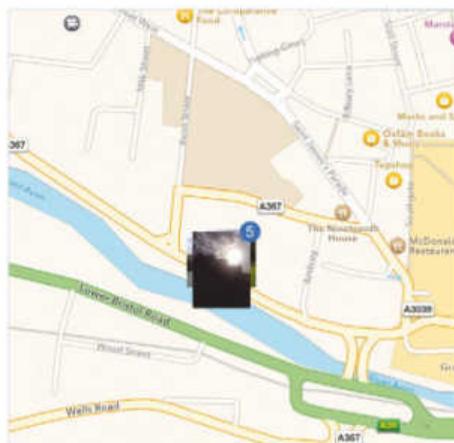
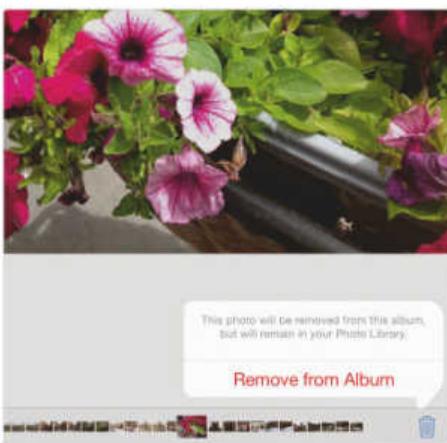
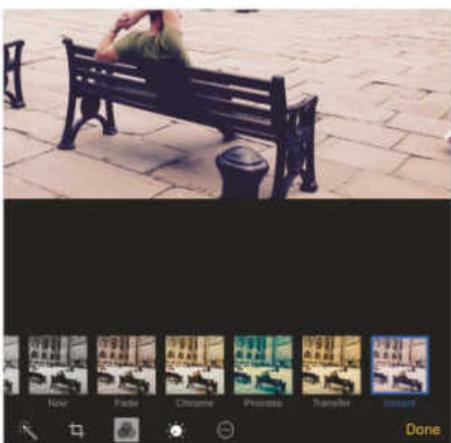
If you've already got photos on your iPad, when you first open the Photos app you'll see the Moments screen. This makes a good starting point: from here you can easily see when pictures were taken, and they're conveniently arranged ready for you to delve deeper and find exactly the one you want. Tap on the Share option next to a Moment and you can choose to share that entire Moment or select images within it to share.

2 Albums

Albums enable you to organise your photos yourself, rather than letting the Photos app do it for you. At the foot of the Moments screen is an Albums button. Tapping this takes you to a new screen with a + symbol in the top-left corner; tap this to create a new album. All your Moments should then pop up. Scroll through and select the pictures you want in the new album (they'll be copied, not moved), then tap Done when you're happy to save the album.

3 Editing

Tap a single image to open it, then tap the Edit button (top right). Auto-Enhance (the magic wand icon) will attempt to 'fix' exposure and colour automatically. It doesn't do a bad job if you're in a hurry, but won't always get it right. You can rotate or crop the pic using the Crop tool (second left), or apply a filter (the middle option). Tap the dial icon (on the right) to adjust Light or Colour or convert to mono. You can then access sliders to adjust the image.



4 Filters

Tap the Filters icon (centre) for a choice of filters – the same filters on offer in the Camera app, but here you can apply them to an existing photo. It isn't anywhere near the range of effects available in the myriad of photo-effects apps in the App Store, but they're not bad – the mono options in particular are useful. If you apply an effect and save the image but later change your mind, you can reopen the image and apply a different filter, or none, at any time.

5 Deleting

Taken too many photos and they're filling up space, or just don't like some? If you're sure you want to delete them, or have them backed up elsewhere so it doesn't matter, tap the trash can icon (bottom-right). Note that this will remove the photo from the iCloud Photo Library on all your devices linked to the online library; if you accidentally delete a photo, it can be recovered for a few days afterwards – you'll find it in the Recently Deleted album.

6 Locations

If you've got Location Services turned on, your location – if it can be determined – will be embedded into each photo you take. In Moments view, tap on Collections at the top-left corner of the screen, and the location is listed along with the date range on each Collection. Tap the location to see a zoomable map showing the shots taken there; tap a stack of photos to see all of the images taken at or around that location.

Editing your photos

Adjust your shots and add effects in Photos

SKILL LEVEL

Taking things further

IT WILL TAKE

20 minutes to get started

YOU'LL NEED

iPad, iOS 9, some photos, optionally some apps with photo-editing extensions



Your iPad's camera can be used to take amazing shots, but the fun doesn't end in the Camera app:

you can apply a variety of adjustments and effects to live up your snaps using iOS 8's dedicated Photos app.

The tools you're likely to use most often are crop-and-rotate and, for portraits, Remove Red-Eye. The Auto Adjust option is also handy: one tap can improve many images. For more control you'll want to get to know the new adjustment options. In Photos, you can manually adjust Light and Colour, and create custom mono conversions. There are also a range of photo filter effects, but the real stars of Photos are extensions, which enable it to plug into other apps and add a near-limitless range of new effects and filters.



HOW TO | EDIT PICTURES QUICKLY IN THE PHOTOS APP



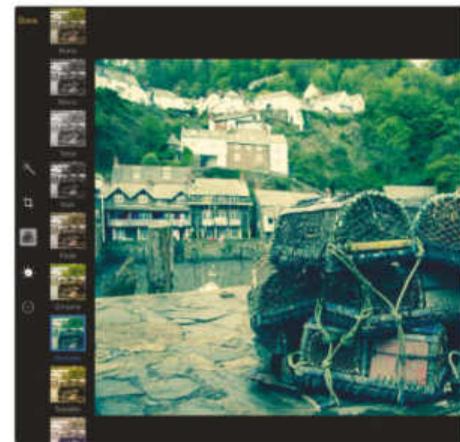
1 Edit and Auto Enhance

Open Photos to review the shots you've snapped, tap on one, then tap Edit (top-right). The editing options appear; their location will vary depending on whether your iPad is in portrait or landscape orientation. Often the most immediately useful option is Auto Enhance (represented by the magic wand icon). Tap this and Photos will attempt to improve the colour and contrast of your photo automatically.



2 Crop and rotate

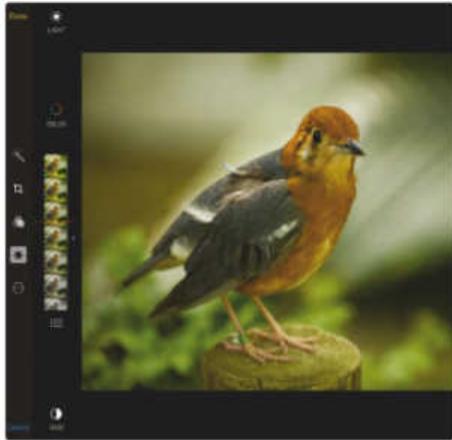
Tap the Crop tool. If Photos detects a line in the image that it thinks should be horizontal, it automatically rotates the shot to suit. You can fine-tune using the wheel, or undo by tapping Reset. To crop, drag the white frame border or its corners. Optionally, tap the aspect ratio icon (overlapping squares); a rule-of-thirds grid will be displayed to help you perfect your composition. Click Done to save your changes.



3 Using Photo Filters

The Photo Filters option enables you to quickly add special effects to your photos. Tap the filters icon to reveal a row of effect previews. Tap each in turn to see how it affects the image; tap Done to finish. You can remove an effect by tapping its preview again or by tapping None, and add further adjustments afterwards. You can revert to the unedited shot at any time, even if you've closed and reopened it.

HOW TO | ADD ADVANCED EFFECTS



1 Remove red-eye

Red-eye (caused by reflected camera flash) is a common problem in portraits. Photos has a built-in red-eye removal tool, which will appear if the app detects a face in shot. Tap the tool (the eye-shaped icon), then tap on each affected eye. Sometimes you need to tap a few times for Photos to locate the red-eye; it can help if you pinch to zoom in first. Tap Done to finish.

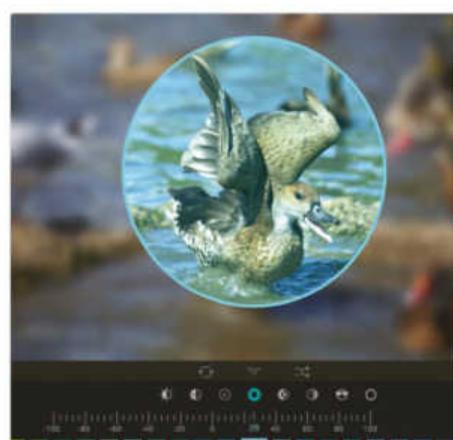
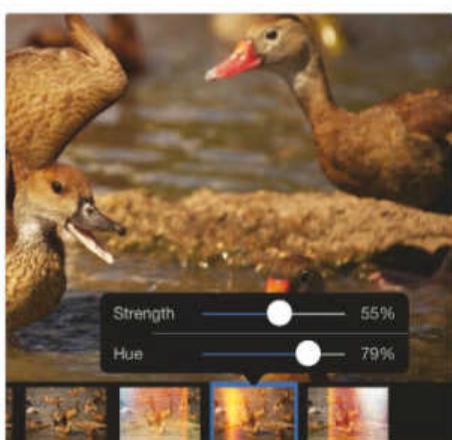
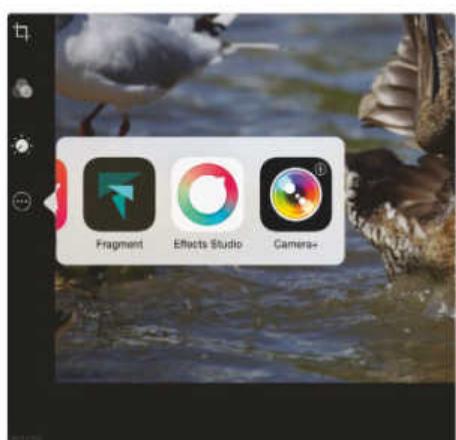
2 Adjustments

The new adjustment options offer both simple and advanced modes. Tap the dial icon, then tap the option you want to adjust (Light, Color or B&W). You'll see a spectrum of small preview images. Drag this to apply the adjustment (lightening or darkening the image, increasing or reducing colour saturation, and so on). Tap Done to apply or Cancel to reject it.

3 Expert editing

Want more control? Either tap the menu icon that shows three horizontal lines or swipe the preview slider to reveal further controls (such as Saturation, Contrast and Cast). You can use these sliders to adjust each specific setting and fine-tune images with precision. Either swipe back to the basic slider, or tap the three-line icon and hit the main icon to return.

HOW TO | USE EXTENSIONS IN PHOTOS



1 Install and activate

Extensions are a new addition to the Photos app, and they change everything. First you need to install a photo editing app that supports extensions, such as Pixelmator, ProCam and Camera+. After installing the app you'd like to use, open Photos, pick a shot and tap Edit. Now tap the Extensions icon (the circle with three dots), tap More and then activate the extension for the relevant app.

2 Access Extensions

Your chosen app now appears in the list that pops up when you tap Extensions in Photos. Tap it (you might have to OK an alert the first time) and you will see a bunch of new editing options, depending on the extension app that you have chosen. Pixelmator, for example, offers a range of 14 different effects, while Camera+ contains a whole suite of more traditional photo editing options.

3 Add effects

Here we're adding some cool graphical effects using and app called Fragment. When finished, tap Done to return to Photos, then Done again to save all your changes. Reselect the image and tap Edit, then tap and hold one finger on the image to view the original. This enables you to compare it with your edited version. To remove all edits, tap Revert, then Revert to Original. You can do this at any time.

Put your photos in the cloud

Automatically back up every picture you take to online storage

SKILL LEVEL

Anyone can do it

IT WILL TAKE

Five minutes to set it up, longer to upload photos

YOU'LL NEED

iPad, iOS 9, iCloud account, photos



Keen photographers often become painfully aware of the problems with taking snaps on different iPhones and iPads, and then trying to sync them all up. Things get worse if you also import photos from a digital SLR to a Mac or PC.

iCloud Photo Library is Apple's system for dealing with this (it supercedes the old Photo Stream feature, which remains available). With iCloud Photo Library turned on, any shot you snap on an iPhone, iPad or iPod touch, or import into the Photos app on a Mac, is instantly stored online in your iCloud account – in its full, original quality –

and then automatically added to the copy of that library that's stored on all your devices signed into the same iCloud account. You can then view all of your photos regardless of source and which Apple device you're using.

Unlike with My Photo Stream, the images you store in iCloud Photo Library count towards your iCloud storage quota, and you get only 5GB for free. Apple has made it a lot less expensive to buy additional space though, with 50GB now costing just 79p a month. But you might quickly run out of that if you take a lot of photos and videos (which are also included in the library).

What if devices don't have much space either? That's covered with an option that stores versions optimised to individual devices on them, while the original version is stored in iCloud.

Photo Stream remains available in case you were happy with the old system, and it can be used at the same time as iCloud Photo Library. It's useful if you have an old device or Mac that can't run at least iOS 8 or OS X Yosemite – or if you don't want to pay for more iCloud storage space and don't mind working with its more manual approach to photo management. Let's look at the more modern option, though...

Back up your shots

With iCloud Photo Library off, photos taken on your iOS devices are included in backups of those devices to iCloud (Settings > iCloud > Backup). Not so if iCloud Photo Library is enabled; the library holds all your full-quality originals. If you have a Mac, consider setting it to download and keep an offline backup of them, in case something happens to your iCloud account.

Manage Storage	
PHOTOS	
iCloud Photo Library	8.4 GB >
BACKUPS	
Aerial	736.4 MB >
iPad This iPad	655 MB >
DOCUMENTS & DATA	
Other Documents	367.1 MB >
Pages	139.1 MB >
Numbers	35.1 MB >

You can check how much storage is used by iCloud Photo Library in Settings > iCloud > Storage > Manage Storage. Use Photos (iOS or Mac) to actually manage its contents.

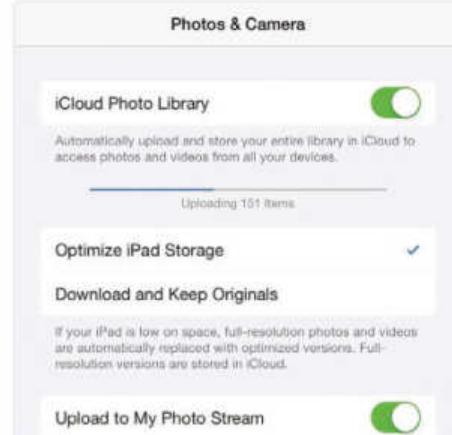
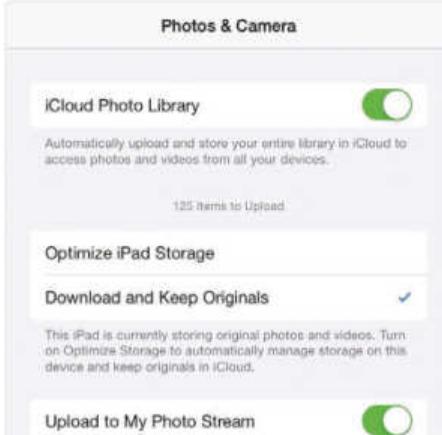
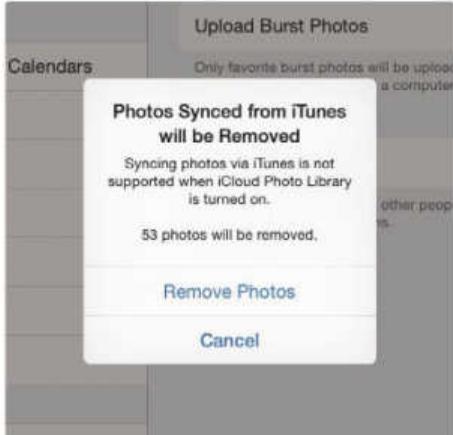
Buy more storage

You might want to buy more storage to back up your iPad to iCloud and provide more space for online photos. Tap on Settings > iCloud > Storage > Buy More Storage. Now tap on one of the upgrade options and tap Buy. Enter your Apple ID password and tap OK to purchase an upgrade. All of Apple's iCloud storage plans are charged monthly.

CURRENT PLAN	
50GB	£0.79 a month
CHOOSE UPGRADE	
200GB	£2.49 a month
1TB	£6.99 a month

Apple's monthly pricing tiers for iCloud are 79p for 50GB, £2.49 for 200GB and £6.99 for 1TB. This space is shared with iCloud email and other services.

HOW TO | START USING iCLOUD PHOTO LIBRARY



1 Switch it on

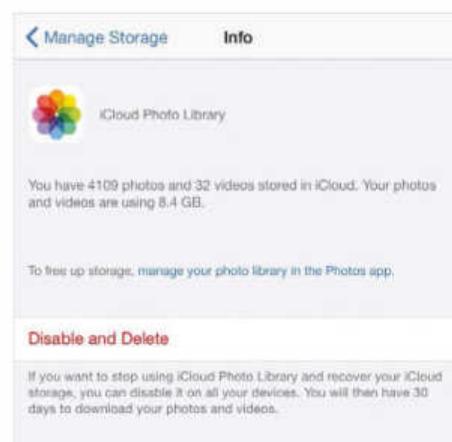
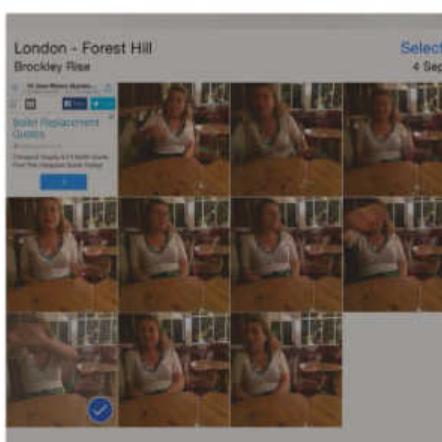
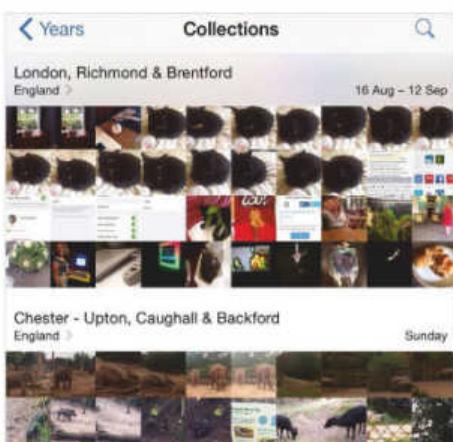
First ensure that your iPad's connected to the internet, preferably using a Wi-Fi network (because you are going to be uploading a lot of images). iCloud Photo Library is off by default, so start by going to Settings > Photos & Camera, wait a moment for the iCloud Photo Library setting to appear, then turn on its switch. If you've already synced photos from iTunes on your computer, you'll be warned that they'll be removed from your iPad, so make sure you have a backup of them, then tap Remove Photos.

2 Stop iTunes syncing

You'll see a small box that indicates iCloud Photo Library is being turned on, and then be returned to the iCloud settings page. If your iPad contained any photos taken with its camera, those will be uploaded to iCloud Photo Library, and you'll see an indication of progress under the library's row. When that's finished, or if it isn't necessary, the same place on the page will display the last date and time that the online library was updated. Photos taken in future upload when on Wi-Fi and powered.

3 Optimising storage

One big benefit of using iCloud Photo Library is that you can save storage space on your iPhone. This is because you store full-size photo files in iCloud but smaller versions of the images on your iPad (at the appropriate size to display on the device's screen). Tap Settings > Photos & Camera and select Optimise iPad Storage to keep these smaller files on your iPad. Selecting the alternative option, Download and Keep Originals, will keep the full-size files on your iPad instead.



4 Viewing your photos

With iCloud Photo Library running, you continue to use your iPad as normal. The Photos app now displays all the shots in iCloud Photo Library, and any other devices linked to the same iCloud account (such as your iPhone or iPod touch) with iCloud Photo Library enabled will display the same photos in their Photos app. It's only if you try to edit one that you'll discover it's from another device: Photos will offer to download a copy to edit. You can still create and share albums just as before.

5 Viewing your photos

Unwanted images can be removed from Photos as usual. Tap Select, tap an image to select it (a blue tick will appear on each selected image) and then tap the trash can icon. When prompted, tap Delete Photo to confirm. You can still find a deleted photo in the Recently Deleted album (Albums > Recently Deleted). Deleted files are kept in that folder for up to 40 days, so there's a safety net if you change your mind. Deleting files in the Recently Deleted folder removes them permanently from all devices.

6 Turning off the feature

If you chose to optimise photos for your iPad, turning off iCloud Photo Library offers two options: to remove them from your iPad altogether (other devices connected to it are unaffected) or download everything (if it'll fit). If the feature isn't for you (perhaps it will cost you too much), you can free up the online storage space it uses by going to Settings > General > Usage > Manage (iCloud) Storage > iCloud Photo Library; you'll have 30 days to download your stuff before it's removed from iCloud.

Record a time-lapse video

Condense minutes or hours into seconds of fast and thrilling video

SKILL LEVEL

Could be tricky



You will have seen time lapse videos many times before, most likely in documentaries about

IT WILL TAKE
Minutes to learn, but potentially many hours (storage space permitting) to perfect

YOU'LL NEED

iPad, iOS 9, optionally a Glif (for iPhone) or Grifiti Nootle (for iPad) and a tripod for static time lapses

nature and the world, but also in music videos, films and TV shows. They are videos that show the passage of minutes, hours, days or even weeks, all condensed into a few seconds. The scene changes with dramatic effect, with clouds hurtling by like supersonic jets rather than taking their usual idle path across the sky, and shadows cast by the sun sweeping across a landscape. The camera doesn't have to be static, though. A time lapse may also show a camera's movement around the world.

Creative potential

Time lapses offer huge creative potential and the opportunity to marvel at the world changing around us in a more intense way than it's normally perceived. You don't have to be content to watch other people's time lapses, though, because your iPhone's Camera app has a special mode for recording them.

Studio Neat, which develops and sells a more full-featured time lapse app for iPhone called Frameographer, published a blog post (bit.ly/aboutios8timelapse) about how Apple has implemented the time lapse mode. If you're curious about how your device records hours whizzing

Landscapes reveal more drama when observed with ever-changing shadows sweeping across the land.



Time lapses are sometimes used to mimic a first-person perspective in music videos.

by, it is well worth a read. In short, the Camera app is intelligent enough to know that for a short time lapse you'll need more frames – though still not as

The scene changes with dramatic effect, with clouds hurtling by like supersonic jets

many as a normal video – while a longer time lapse requires fewer frames if it's to remain fast and exciting for the viewer.

Studio Neat's Glif and Grifiti's Nootle are tripod mounts for iPhone and iPad,

respectively. (Early versions of the Glif were specifically designed to fit the iPhone 4's form, but the latest model is adjustable – enough so that it works perfectly with the iPhone 6 and iPhone 6 Plus.) If you're a dedicated iPhone photographer, these accessories are affordable at under £30 from places like Amazon, although you'll also need to factor in the cost of a tripod, assuming you don't already have one. Both feature common-sized tripod mounts, so if you already have a tripod for your SLR or an old camera, you'll be able to put it to good use here.

Setting it up

Recording a time lapse recording is simple enough. Just as with other camera modes, you need to set a focus point, possibly adjust the exposure – although for lengthy time lapses the light may change dramatically anyway – and, finally, tap the record button. Starting a recording is straightforward, but getting good results requires some extra care and preparation. You'll need to find a good spot from which to shoot, just as for any photo or video, but special care has to be taken that you're not positioning the camera somewhere that a person, animal or vehicle will settle and ruin your results.

For a time lapse that's recorded from a fixed position, you need to ensure that the tripod is stable, and that it's unlikely to get knocked by passersby – even a small movement can ruin the shot.



HOW TO | SET UP AND RECORD TIME LAPSE FOOTAGE



1 Prepare the hardware
If you're using a Glif, use its hex key to open it up just wide enough to hold your iPhone, but don't fit the phone yet. It's easier to attach the Glif to the tripod first. When you insert the iPhone, don't over-tighten, but make sure the iPhone won't move during recording, because even a small shift will be noticeable. Ensure that the tripod is also stable. Open the Camera app and swipe the list of modes until you reach the Time-Lapse setting.



2 Compose and focus
Position the tripod so that the scene is framed how you want it. To avoid the camera refocusing if, say, a bird flies into view, lock the focus by tapping a finger on the area you want to focus on. A yellow box appears, indicating that the focus point has been set there, but keep your finger held on the screen until the box animates briefly and a yellow 'AE/AF LOCK' label appears. Be careful not to tap the screen again or this will clear the focus lock.



3 Exposure
The focus point's yellow box remains on-screen, although slightly dimmed. If it hasn't been set correctly, tap the screen to clear it and try again. The lighting of a scene – especially a landscape – will inevitably change if you record for long enough, but you might still want to compensate for over- or under-exposure at the start. The current exposure setting is indicated by the relative position of the sun icon that's adjacent to the yellow box.



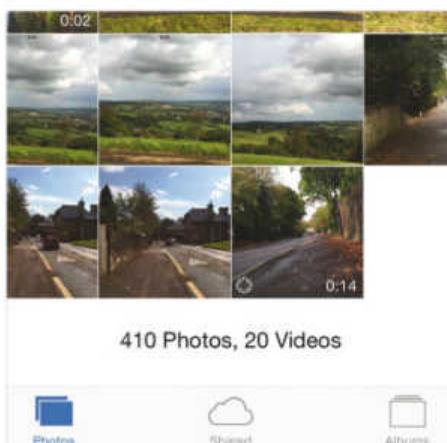
4 Adjust exposure

To change the exposure from the setting determined by the app – which it bases on what it sees at the point on which you focused – tap and hold your finger on the screen again and slide it up or down to increase or decrease the exposure, respectively. Notice how the sun icon moves to reflect your action. Make sure that you didn't accidentally clear the focus point when doing this – check that the yellow AE/AF LOCK badge is still at the top of the screen.



5 Start recording

To begin, tap the red Record button. While the duration for which you record is relevant, you'll have to use your intuition and growing experience with shooting time lapses to work out how long to record for. Rather than indicating the duration of the recording or the resulting time lapse, the only on-screen indication that anything is happening is the animated pattern of white markers around the Record button, which changes to a Stop button.



6 Lockdown

Unlike in the Camera app's other video modes, tapping the screen while a time lapse is being recorded won't clear the focus and exposure settings. They are locked-in for the duration. The Stop button is the only on-screen control that will react, but be careful not to press the Home button – that will also stop the recording. Afterwards, you can distinguish time lapses from other videos by looking for the round 'clockface' icon at their bottom-left.

Video editing in iMovie

Make more of your video footage by turning it into a movie

SKILL LEVEL

Taking things further



IT WILL TAKE

20 minutes

YOU'LL NEED

iPad, iOS 9, iMovie, video footage, music tracks

Video clips recorded on your iOS devices can be quickly turned into movies or trailers. Movies use a range of different templates such as News, Travel or Neon (the latter is a good choice for pop videos); trailers are templates packed with overlays and effects into which you drop your footage to make Hollywood-style trailers

with themes like Fairy Tale, Romance and Superhero.

When making your first movie, be sure to shoot in landscape mode as it'll be easier to frame and edit. Also, shoot in short bursts – unless you're Alfonso Cuarón, you need to keep your edits short and snappy. Shoot lots of footage with a variety of subjects, in close-up, middle- and long-distance, so you'll

have lots of options for piecing together your movie. Look at feature films: they often include a lingering shot of a landscape or building for scene-setting; not just people talking or in action.

Finally, don't forget to record some background sound – general hustle and bustle, traffic, people chatting, birds tweeting... this can be used to fill any gaps you might have in the audio track.

VISUAL GUIDE | FIND YOUR WAY AROUND

Make your directorial debut on iPad with the easy-to-use features in iMovie

Movie title

1 To change the name of your movie, you'll need to tap the back arrow (top-left), then tap on the title in the project details page, which also gives you the option of previewing the video, sharing it or deleting the project.

Media library

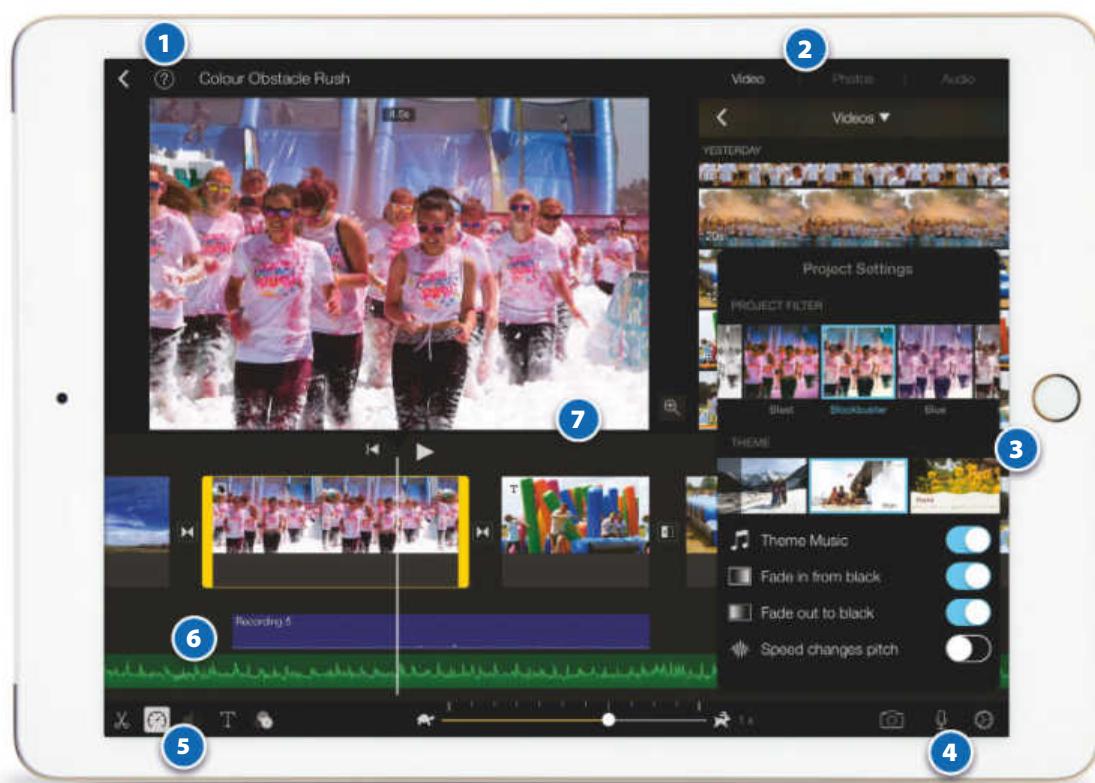
2 This is where you gain access to your media. Videos and photos are usually stored in the Photos app. Audio includes iMovie's built-in music tracks, tracks in your iTunes library, plus recordings you've made.

Hide audio/undo

3 The sound wave icon collapses the audio tracks to give you more room on the timeline (but it doesn't mute the tracks). The curvy arrow is the undo button.

Camera, mic, cogwheel

4 When no clip is selected, use these icons to record video or take a photo with the iPad's camera, record a voiceover using the iPad microphone, and access the Project Settings. The latter includes adding a filter across your whole movie; toggling



theme music; fading the movie in or out to black; and control over the audio pitch when playback speed of footage is altered.

Editing and effects

5 These icons access the editing tools, footage speed, audio volume, text and filters. Each reveals its own controls.

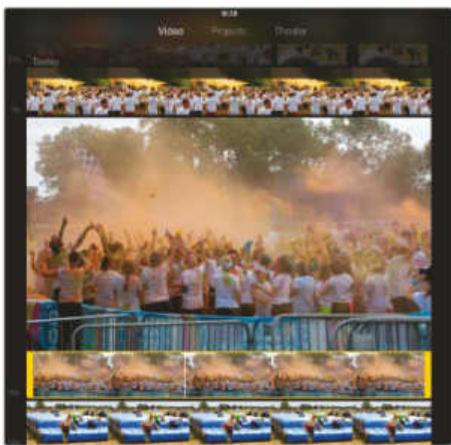
Timeline

6 This is your edit space, onto which you drop your video, still images, soundtracks and voiceovers. This is where you trim, split, reorder, duplicate and delete tracks. You can edit transitions, add filters, tweak timings and so on. We show how to do these on the opposite page.

Live preview window

7 Video, titles and transitions are all played back here in near-real time (some transitions take a bit of processing power). Tapping in the window also provides access to controls for framing clips and setting the scale and position for the Ken burns effect with still images.

HOW TO | PERFORM BASIC VIDEO EDITS

**1 Create a new project**

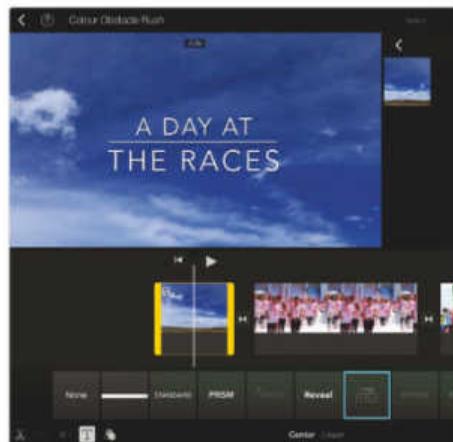
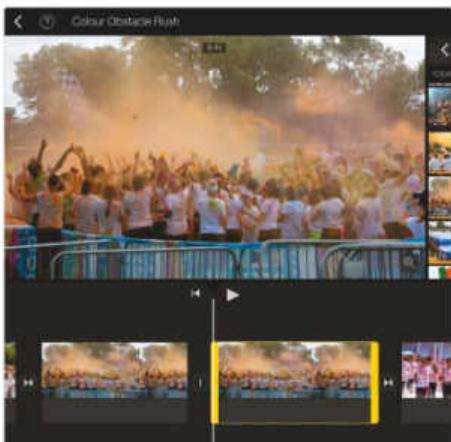
When you open iMovie, it presents your video clips, which are stored in the Photos app. Tap a clip to preview it. You can then start a new edit by tapping Projects or Theater – the main difference with Theater is that your movies are shared over iCloud and neatly presented across your Apple devices, including Apple TV. To start, tap Projects and then the + icon. You can then select either a Movie or a Trailer; Movie is what you'll want most of the time. Next, choose from eight themes; we've gone with 'Bright'.

2 Adding clips

Tap Create and you're asked to insert media into the project, which can be any video, photos or audio stored on the iPad. You can tap the camera icon to take a photo or movie within the app. Tap Video, then a category to view your clips. In the menu shown when you tap one, tap the downward arrow to add it to the timeline, or the play button to preview it. The three dots give options to add audio only and overlays. Adding a clip in this way creates another video track, shown as an insert in the main video.

3 Start editing

To do rough edits in the media library, tap a clip and drag the yellow handles to trim it. Slide your finger across the clip to move the playhead. When you add media to the timeline, subsequent clips are added before or after the current one depending on the playhead's location. To reorder clips, tap and hold one, then drag it to its new location. If you let go while the clip's out of the timeline, it's removed from the project. Pinch or spread two fingers to zoom in for accuracy or out for an overview.

**4 Complex edits**

The yellow trim handles are available in the timeline, but you can also do things like insert a new clip in the middle of another. Move the playhead over the clip, select it and then swipe down over the playhead to cut the clip in two. You can now insert a clip at the edit point you've created. The same technique can be used on the audio track. When you add a photo, you can control the Ken Burns effect (panning and zooming): tap it, then set the scale and position at either end of the clip in the live preview.

5 Changing transitions

You can alter the style of transition at an edit point by tapping it to reveal options: none; one based on the chosen theme; cross dissolve; slide and wipe, with control over direction; and a fade. The icon in the timeline changes to reflect your choice, and the transition itself is previewed in real time. Tap the two yellow triangles under the transition for dual video tracks, which give more accurate control over the transition's start and end. You can alter the time of each using the values in the bottom-left.

6 Text and effects

Adding text is simple: tap a clip and then tap the T icon. There are nine effects, each with a different font and animation. You also have 10 different overlays for changing the look of your video – tap one to apply it. To add a fade in and out to black at ends of your video, tap off the timeline so the cog icon is active, then toggle the effect there. To add a voiceover, place the timeline where you want the audio to start and then tap the mic icon followed by Record. Note that you'll get a three-second lead-in.



Presentation 6

16:27

42%



ndo

Cut Copy Paste Delete Skip Transition



Advanced

Get even more from your iPad with these expert features

- 132 Extensions**
Do more on your iPad with extensions
- 134 Read ebooks and PDFs**
Use the iBooks to enjoy books on the move
- 136 Listen to podcasts**
Get audio and video podcasts the easy way
- 138 Stream music and video**
Use AirPlay to enjoy your media on other devices
- 140 Share music, books and apps**
Share your purchases with Family Sharing
- 143 Take a course with iTunes U**
Find support materials or courses to study
- 144 Use Bluetooth accessories**
Pairing wireless kit with your iPad is easy
- 147 Pages**
Powerful publishing on the move
- 151 Keynote**
Polish and deliver presentations
- 154 Numbers**
Spruce up your spreadsheets!
- 156 Share with AirDrop**
A quick way to send between any devices
- 158 Print from your iPad**
Print wirelessly directly from your handset
- 160 Be more mobile with Handoff**
Start working on one device and finish on another
- 162 Call and message forwarding**
Make – and take – calls and texts on other devices
- 163 Locate a lost iPad**
If your tablet goes missing, all is not lost...
- 164 Maximise battery life**
Make your iPad go that crucial extra mile
- 166 Troubleshoot your iPad**
What to do when your iPad goes a bit squiffy
- 168 Creative photo editing**
Do more with your pictures in Pixelmator
- 174 Make your own music**
Turn your ideas into tunes with GarageBand

Extensions

Do more on your iPad with extensions

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9, an app that provides a Share or Action extension



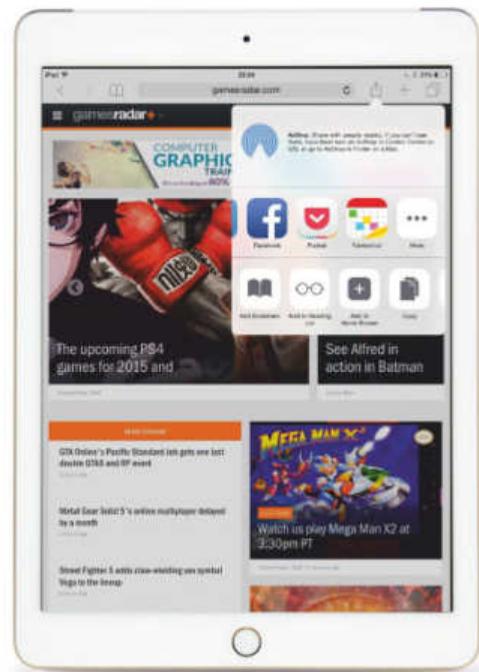
A long-standing complaint about iOS is the tight degree of control that Apple exercises over what apps are able to do. Those restrictions have been relaxed in iOS 9 to allow apps to extend the system's capabilities in carefully defined ways. This means you aren't reliant on Apple adding support for a particular social network to be able to share something directly to it, and kludgy workarounds such as special bookmarklets that send a web page to an online service are no longer necessary.

Extensions enable photo-editing apps to make filters and tools available within the Camera and Photos apps. Information from apps can be displayed in widgets in Notification Centre's Today view,

and acted upon from there. New keyboards enable entirely new input methods to be used, which can make life easier when typing into forms, for example. The ability to share a page to new places and perform new actions upon it, such as translating it between languages, that is particularly relevant in Safari, so we'll show you the feature there.

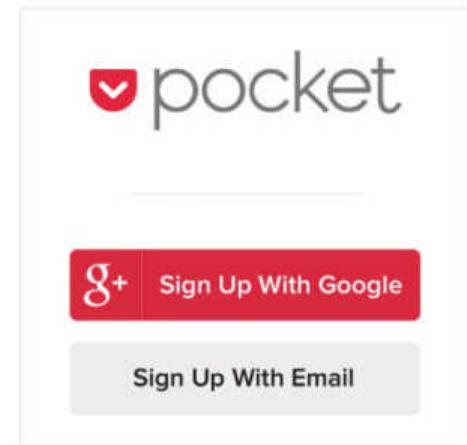
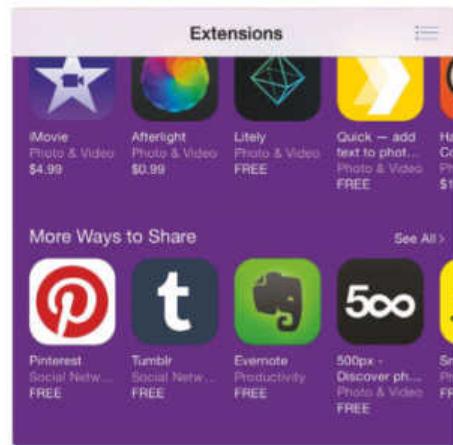
We'll show you where to find some of the most popular apps that add extensions, plus how to activate and manage them.

Extensions mean you aren't reliant on Apple adding support for new social networks



Extensions allow you to add new destinations for sharing things and actions for processing them to the share sheet that appears in many of iOS's built-in apps and third-party ones, too.

HOW TO | FIND EXTENSIONS



1 Finding extensions

There's no Extensions category in the App Store because apps of all kinds include them. Apple showcases good examples at <http://apple.co/1K19ejo>. If you have a recent version of something there, you also have its extension, but you may not like an extension forcing its way onto the sheet that appears when you tap a Share button, so turning it on is left to you.

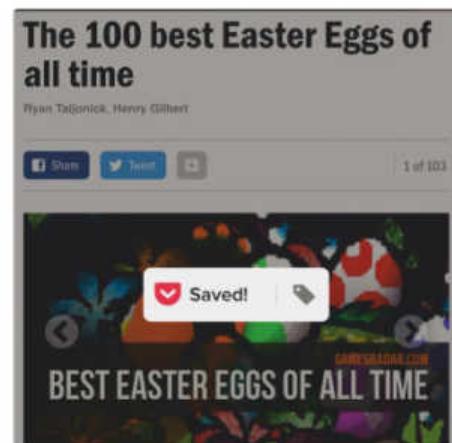
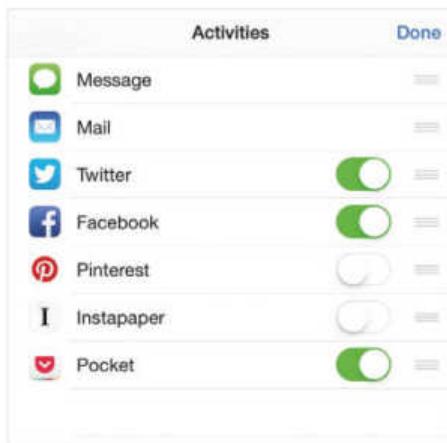
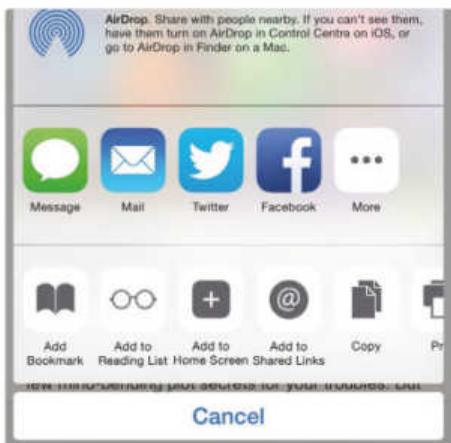
2 Extensions for sharing

Apple's curated selection is organised by the types of extension. Scroll each row horizontally to see highlights, and tap See All towards the right of any row for more. The bottom two groups contain Share and Action extensions, which is where you should look to add support for social networks and online services not accommodated by iOS itself.

3 Install an extension

Pocket is a bookmarking service similar to Safari's built-in Reading List but with some organisational features that Apple's offering lacks. Download it now. That's all that's required to get an app's extension on your iPad. Using this one requires an additional step, besides turning it on: open its app and follow the prompts to sign up for the free online service.

HOW TO | MANAGE AND USE EXTENSIONS



1 See what's available

After signing in through the Pocket app, visit a page in Safari and tap the Share button in the bottom toolbar. In the Share sheet, Share extensions appear in the middle row. They might send the page to an app or an online service, or post a link to it on a social network. Tap the More button at the far right of the row for a list of all available Share extensions on your phone.

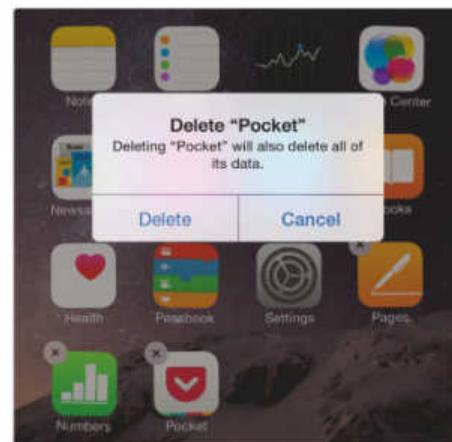
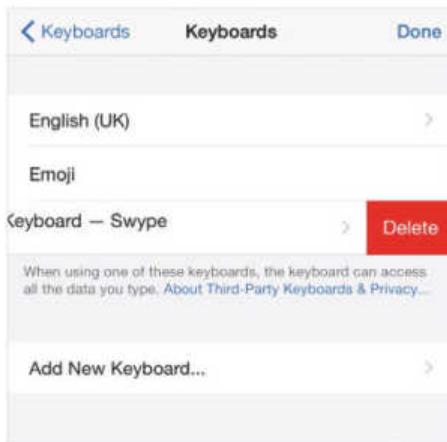
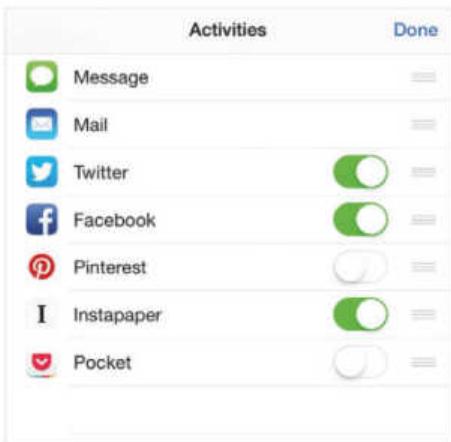
2 Turn on and rearrange

Switch on Pocket to make its extension appear in the Share sheet. Tap-and-hold on the rightmost icon in each line (the one with three lines), then drag up or down to change the order of enabled extensions in the Share sheet, saving you having to swipe to reach the extensions that you will use most often. You might also turn off any you don't care to use (see below). Tap Done.

3 Try it out

Now tap Pocket's icon in the middle row of the Share sheet to save the current page to your account. On the right-hand side of the confirmation that appears in the middle of the screen, tap the tag to assign keywords – helpful if you save lots, and on different subjects. Open the Pocket app and it'll download the page you bookmarked so it can be viewed while offline.

HOW TO | DISABLE AND REMOVE EXTENSIONS



1 Disable extensions

If you decide to try out (say) a rival to an online service because it promises additional features, you can temporarily disable the extension for your existing service without removing it altogether. With the alternative app installed, go back to the Share sheet and tap More. Switch off the old extension, and enable the alternative you want to evaluate.

2 Disable keyboards

Keyboards can be hidden from the list that appears when the smiley face/globe key is held down. Go to Settings > General > Keyboards, tap Keyboards at the top of that page, swipe right to left on the one to disable, then tap Delete. (Don't worry, this won't delete that keyboard from your iPad.) Tap Add New Keyboard... on the same page to re-enable it.

3 Remove extensions

Extensions are properly removed from your iPad only when you remove the app they came with. Tap-and-hold on the app's Home screen icon, then tap the cross that appears at its top-left corner. If you later reinstall the app, iOS remembers whether its extensions – including keyboards – were turned on, but it may forget about your chosen order for them.

Read ebooks and PDFs

Use the iBooks app to access an abundance of literature

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9,
iBooks



Apple's iBooks app used to be a free download from the App Store, but it now comes baked into iOS 9 as

standard, which means that it comes pre-installed on every new iPad. Open it and tap **Featured** on the bottom menu to start filling your virtual bookshelves.

There are over 1.5 million ebooks available in the iBooks Store, and many are free, particularly older ones and out-of-print classics. There's everything from interactive text books and children's books to the latest bestsellers and biographies, and much more. It works much like the iTunes Store: you can browse the categories, go straight to the charts, or carry out a search. Many books have reviews from other readers, and in some cases you can download a sample to dip into before splashing out.

When you've found a book you want, tap its price to purchase it, or the adjacent **Sample** button to read a few

pages. When it's finished downloading, it appears in the **My Books** screen. Simply tap its cover to start reading it.

Take the time to customise iBooks: you can change the font or text size, the brightness and even the 'paper' colour. Books you buy on your iPad are also available on your other devices, and you can set your iPad to automatically download purchases you make on those devices by going to **Settings >**

iTunes & App Store

In **Settings > iBooks**, you can also choose to sync bookmarks and how your books are arranged.

Other formats

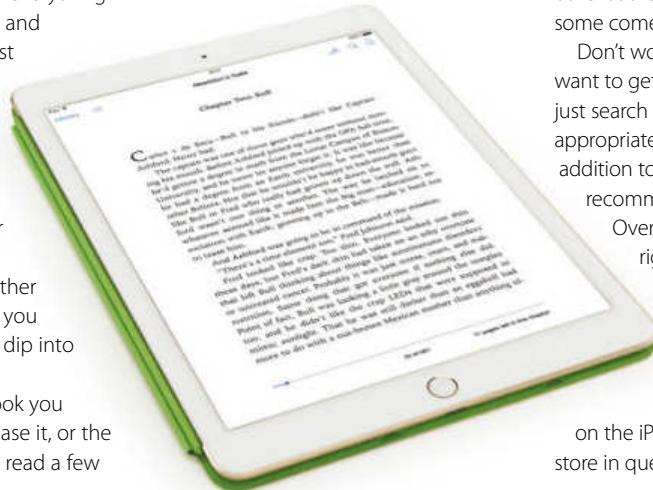
Note, however, that ebooks are not all the same. Multi-Touch Books (aka Interactive iBooks) will work only on an iPad. The iBooks app will also open PDFs as well as ebooks you get from the iBooks Store, and also many ebooks from other sources – but not all, because some come in different formats.

Don't worry, though: if you've got or want to get ebooks from other sources, just search the App Store for the appropriate reader app and install it in addition to iBooks. Waterstones.com

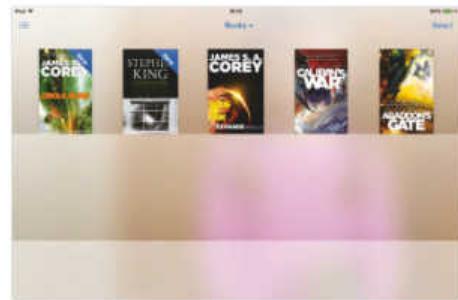
recommends a free app called

OverDrive to handle the digital rights-protected ePub ebooks that it sells.

Unlike iBooks, though, other ebook apps such as Kindle, Kobo and Nook don't have integrated stores on the iPad, so you'll need to visit the store in question using a web browser.



HOW TO | FIND, MANAGE AND READ EBOOKS WITH iBOOKS



1 Get books

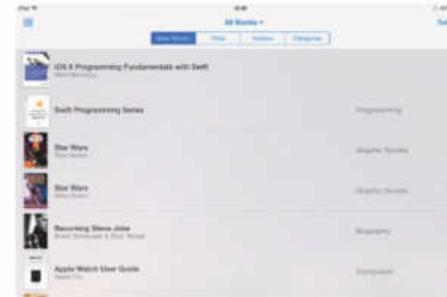
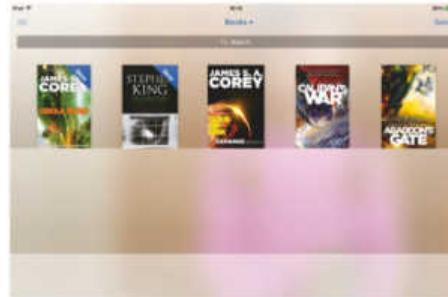
To fill your virtual bookshelves in the iBooks app, tap **Featured** in the bottom bar and you'll be taken straight to the iBooks Store. Just like the App Store, it offers several ways to find what you want: tap **Categories** at the top to browse, or scroll down for featured titles, reader recommendations and more.

2 Find and buy

Other items in the bottom bar enable you to see the current charts (paid and free are listed separately), view top authors (ditto), or search by typing into the bar at the top-right corner. Tap the item you're interested in, then tap the price button to buy it or **Sample** to try it. It will download and appear in your library.

3 Organise your library

Tap **My Books** to return to your library. New and unread purchases have a blue **New** flash. Hold on a cover and drag to rearrange books – however, you can't do this while you're in the **All Books** view (top-centre). It only works in collections, which are the way you organise your library in iBooks, rather than using folders.



4 Switch collections

To create a new collection, tap All Books at the top of the screen, followed by New Collection. After you've given it a name, tap in the same place at the top of the screen to switch between collections. To organise books into collections, tap Select, then some book covers, then Move in the top-left corner.



5 Search

Once you have a fair number of books, finding the one you want might become a little tricky, not least because you can view only one Collection at a time. Thankfully, you can search for titles from all your Collections – swipe downwards on the view of your books to reveal the search bar. Tap on it and start typing a title.



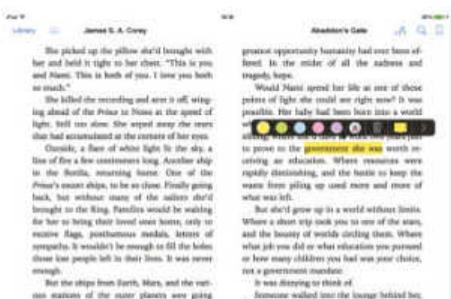
6 Change view

The list-like icon at the top-left on the My Books screen switches between large cover art and a detailed list view. In the latter, you can tap the buttons at the top of the screen to sort your books by title, author or category, as well as view them in the order in which they were added to your library. The Select button remains available in this view for you to organise things.



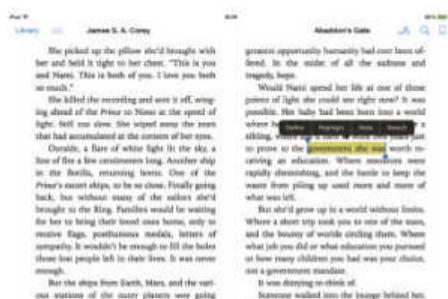
7 Reading options

From any view, tap a book to open it. Tap the AA icon (top-right) to change the font, text size, brightness or paper colour – Night inverts things to white-on-black, which may be more comfortable for night-time reading. You can even change how you navigate, from viewing pages individually to scrolling continuously.



8 Navigate

While reading a book, tap the list-like icon near the top-left corner of the screen to get a quick view of the current book's table of contents, plus any bookmarks you've made or notes you've added. Simply tap on any of the entries to jump to that point in the book, or tap Resume to return to the page you were reading.



9 Bookmark and Search

Tap the icon next to the magnifying glass (top-right) to bookmark the current page; tap again if you want to remove it. You can add as many bookmarks as you like. To search the book's text, tap the magnifying glass and type, then tap one of the excerpts that shows the contexts in which your words were found.



10 Highlight and note

You can also mark specific passages: tap and hold or drag your finger over a section of text, then drag to select what you want. It will be highlighted in yellow; tap that range of text to change its highlight colour or underline it, remove the highlight, add a note, or to share the passage in a message or on a social network.

11 More options

Tapping the right-pointing arrow in the pop-up from the previous step reveals yet more options: you can copy the highlighted passage, get a definition of a word, add a note, search for the same text in the rest of the book (see step 9), or open a link; this last option appears only if there is a web address in the selected text.

Listen to podcasts

Get free audio and video podcasts the easy way

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



Podcasts are audio and video shows made available online, the overwhelming majority of them for free. Some are professionally produced, but many are made by people who simply love their subject matter. Your iPad comes with a Podcasts app for listening to them, and Apple provides a catalogue of podcasts for you to browse, just like you would the iTunes Store or the App Store.

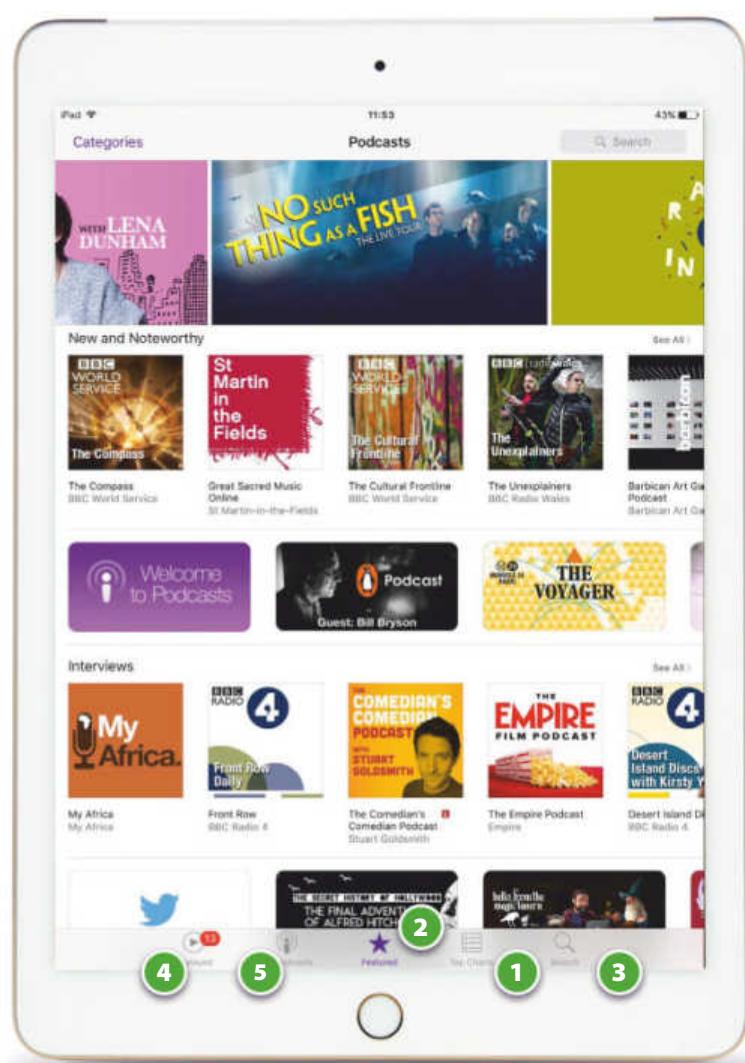
There's a huge range of podcasts available, and the topics are as varied as

the people who create them. It's easy to find shows that fit your interests; you can search manually, and Apple highlights notable shows and charts what's popular.

You can download individual episodes or subscribe to shows so that you never miss an episode. In fact, your iPad is able to download new episodes in the background, so that they're ready to play when you need them. A popular use for this is to ensure you have some fresh entertainment to hand during a regular commute to or from work.

There are hundreds of thousands of free audio and video podcasts to download

VISUAL GUIDE | THE PODCASTS APP



The Podcasts app makes it easy to explore the vast catalogue of shows on offer

Top Charts

1 Immediately find out what's popular with other people by tapping Top Charts in the bottom bar. There are separate charts for audio and video podcasts. Tap one to see a description of it, a list of episodes (which you can download individually), and subscription options. By default, the charts show the most popular shows of all types. Tap Categories at the top-left corner to get more focussed results, such as comedy, music and technology.

Search

3 If you still can't find anything suitable, or if you're looking for podcasts about a very specific topic, such as a favourite TV show, a period of history, or a science subject, tap this and type what you're looking for to find matching podcasts in the catalogue.

Unplayed

4 Tapping on this item reveals all the unplayed episodes of podcasts you currently subscribe to, sorted by most recent; scroll down the list and you can see which podcasts were downloaded over the last week, month, last three months and so on. You can also create 'stations' of your podcasts from here for continuous play.

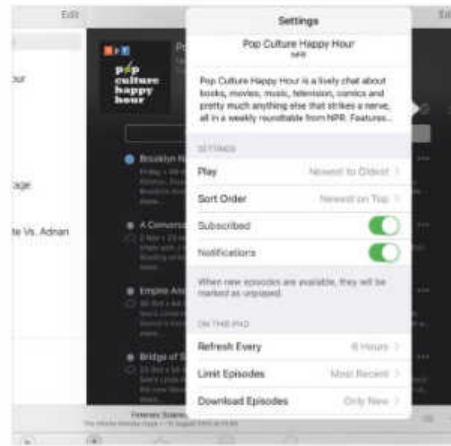
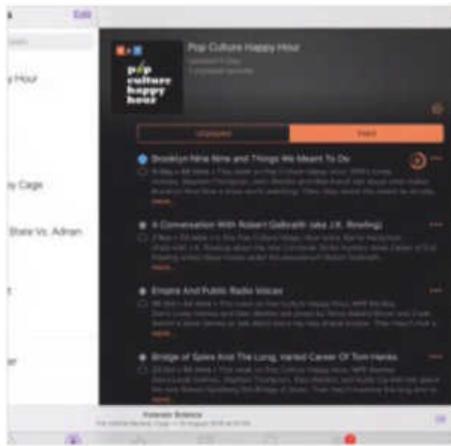
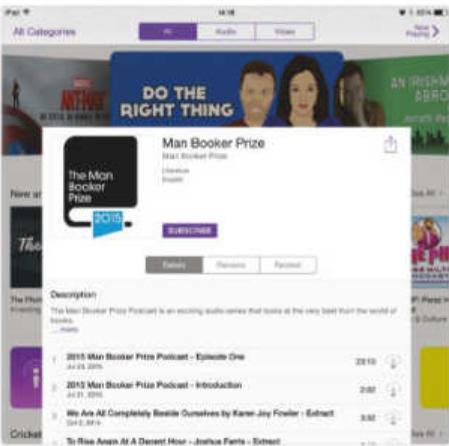
Featured shows

2 Tap this item and you're presented with Apple's picks of the best shows around. It works just like the iTunes Store, with a carousel across the top of the page, which you can swipe or let advance automatically. Scroll down to see more highlights; some are featured because they're related to current events, such as sports. At the top, choose whether to see all podcasts or just audio or video ones, and tap Categories at the top-left to more quickly focus on your interests.

My Podcasts

5 Individual episodes you download and shows you subscribe to are stored here. After downloading an episode, you no longer need to go back to the catalogue to subscribe; you can do it from the podcast's entry here.

HOW TO | LISTEN TO PODCASTS



1 Download a podcast

Tap a podcast in the Featured or Top Charts views, or in search results, and you'll be presented with its details: a description and a list of episodes. Next to each episode, tap the cloud icon with a down-pointing arrow to download just that episode, or tap **Subscribe** at the top of the panel if you're sure you'll want future episodes, too. You can also see what other people think of the podcast by tapping **Reviews**. If it doesn't look right for you, a better candidate might be found by tapping **Related**.

2 Listen to a podcast

Tap **My Podcasts** in the bottom bar and you'll see all of those you've downloaded so far. If that's a great number, tap the search bar to search podcast names, and episode titles and descriptions. Tap a podcast and a panel again lists its episodes under two tabs: **Unplayed** and **Feed**. The latter lists all available episodes. You can play them from either tab. Tap 'more...' next to an episode for its full description; tap the three dots for options to play the podcast next, to save the episode, mark it as played and more.

3 Subscribe to a show

When viewing a podcast's episode list, tap **Settings** to choose the orders in which episodes are listed and played. For serialised shows, choose **Oldest to Newest** so you don't see any spoilers in episode descriptions. You can also set how often your iPad looks for new episodes, and limit how many are downloaded; handy if your iPad has little space available. Episodes are automatically deleted a day after you play them; if you turn this off, tap **Edit** at the top-left of the episode list to delete them.



4 Playback controls

Like radio shows, many podcasts suit listening while you're doing other things, such as housework. If you miss something that's said, tap the 15-second rewind button in the Now Playing strip that appears just above the menu bar at the bottom of the screen. Tap the strip to expand it and view the podcast's artwork as well more playback controls. From here you can quickly move to a specific point in the podcast by dragging your finger along the timeline, or use the 15-second rewind/fast-forward buttons.

5 Speed and Sleep Timer

Also on the Now Playing screen, notice the Speed and Sleep Timer controls below the podcast artwork. When tapped, the first of those cycles through playing the podcast at normal speed, then one-and-a-half times normal, two times normal, and then half speed – handy if presenters talk too fast or too slowly. The timer function (the crescent moon) is handy when you're sleepy. Tap it for options to have playback stop after various durations from five to 60 minutes, or after the current episode is finished.

6 Get social with podcasts

Once more on the Now Playing screen, the Share button (a box icon with an arrow pointing out of it) on the bottom-right provides a link to the specific episode you're playing, which you can share in a number of ways, including via Mail or Messages. To share a link to the podcast itself, tap it in **My Podcasts** and use the Share button at the top-right of its details. While you're there, tap the three dots next to an episode – you'll also see the option to share individual episodes from there.

Stream media with AirPlay

Send audio and video to external speakers or an Apple TV

SKILL LEVEL

Anyone can do it

IT WILL TAKE

20 minutes

YOU'LL NEED

iPad, iOS 9, an AirPlay speaker or an Apple TV

Y

our iPad's portability makes it the ideal entertainment device, whether you want to listen to music or enjoy video content on the move. But there will be times when you want to hear your music through a proper set of speakers, watch your movies on your large-screen HDTV, or reminisce with photos on a much larger screen.

The great thing about the iPad is that you can do all of this – and without having to connect any cables to it.

Wireless for sound

The technology that makes it possible is called AirPlay. This sends audio (and sometimes video, too) over your Wi-Fi network to compatible speakers or an Apple TV. Depending on your setup, you can even play your music on multiple sets of speakers in different rooms. AirPlay is built into your iPad, so you don't need to install any additional apps. You will, however, need a receiver: either a speaker with AirPlay hardware built in or one that you can connect to an AirPort Express (£79), or an Apple TV (from £59). Note that AirPlay is not the same as Bluetooth, and the two are not interchangeable – you'll need AirPlay-enabled kit to use it.

To get started, your iPad and the receiver need to be connected to the same Wi-Fi network. You can see which your iPad is connected to in Settings > Wi-Fi. Exactly how you connect the receiver to the same network varies between devices; its instruction manual will guide you through the process (most are online if you can't find the paperwork).

Once you have both devices on the same network, switch on the receiver and your iPad should detect it automatically. Now all you need to do is start your media playing. Swipe upwards from the bottom of the screen to open Control

VIDEO STREAMING

Apple TV is Apple's device for connecting an HDTV or speakers to your wireless network – visit <http://apple.co/1IBnJxJ> for details. If you want to stream or mirror from your iPad to your PC or Mac, though, consider AirServer (£8.99) – see airserverapp.com for details.

Centre, tap AirPlay and select the receiver you want to play your media on. It's that simple! We'll walk you through the few little niceties on the facing page.

AirPlay Mirroring

As well as streaming audio and video to a receiver device, the iPad can perform what's called AirPlay Mirroring, where the entire content of the iPad's screen is output to an Apple TV. This means you can browse the web, for example, and show others what you're looking at without everyone having to crowd around your iPad.

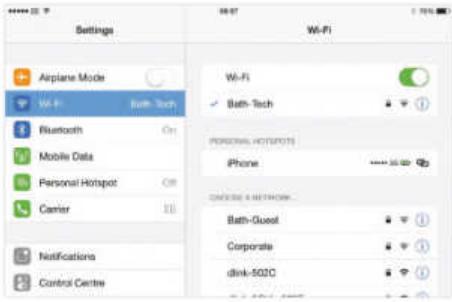
One of the most exciting uses for this is the ability to mirror games. Depending on how they've been configured, some games enable you to use your iOS device as a controller while displaying the action on the big screen via your Apple TV. Other games provide extra information on your iOS device's screen – in the case of Real Racing 2 HD, for example, there's a map of the circuit and a timer that remain on-screen during the race. Real Racing 2 HD and Sky Gamblers: Air Supremacy have a split-screen mode, enabling you to play against a friend, each of you using your own iOS device as a controller. It's the future of gaming!

Sound speaker: the AirPlay advantage



The benefits of AirPlay are numerous. As you'll see in the walkthrough opposite, setting it up is simple. More importantly, you get fantastic audio quality, which is superior to that of audio streamed over Bluetooth because the files aren't heavily compressed. The range is also a great deal better – with Bluetooth technology you need a speaker placed within around 10 metres of the audio source. But with AirPlay the range is as far as your network extends. Using iTunes on a computer, you can stream to multiple speakers, and control playback from your iPad using Apple's free Remote app, which is great if you're having a party and want music throughout your house.

When buying a speaker, consider your budget (you can get online deals on older speakers for £100+, but for a new model with plenty of features, you're looking at £300+), depending on whether you want the speaker to have a charging dock, and how portable you want the unit to be.

HOW TO | USE AIRPLAY TO STREAM MUSIC AND VIDEO**1 Check your Wi-Fi**

Make sure your iPad is connected to your home Wi-Fi network: look for the Wi-Fi symbol in the top-left corner of the screen. If you don't see it, tap Settings > Wi-Fi to find it and connect. Make sure your AirPlay receiver is connected to the same Wi-Fi network.

**2 Free your tunes**

Next, go to the Music app and tap a song to start it playing. To hear it through your AirPlay speaker instead of the iPad's internal one, swipe upwards from the bottom edge of the screen to open Control Centre, then tap AirPlay in the bottom row of buttons.

**3 Pick your speaker**

You'll see all the AirPlay receivers on your network, each with either a speaker or a TV symbol next to it. Simply tap the receiver you'd like to use. Your music will seamlessly switch to playing through that speaker. Now swipe Control Centre downwards to close it.

**4 Control your music**

With the music coming out of the AirPlay receiver, you can control it directly from your iPad: play, pause, skip or adjust the volume. To switch off AirPlay, open Control Centre, tap AirPlay again, and pick iPad to return the audio to the iPad's internal speaker once again.

**5 Enjoy your videos**

The procedure is similar in the Videos app: tap a video you'd like to watch to start it playing. Swipe upwards from the bottom of the screen to reveal a small grab handle, then swipe upwards from that handle to reveal Control Centre, and then tap the AirPlay button.

**6 Destination Apple TV**

Tap a receiver with a TV symbol and your video will start playing on it. Your iPad screen will turn grey and specify where the video is being played. You can control the video's playback from the comfort of your iPad using its usual playback controls.

CONNECTION PROBLEMS

AirPlay is so simple to use that you should rarely have any problems switching output to the device you want. The only thing to watch out for is the difference between receivers capable of video and those capable only of audio.

If you do have any problems, most come down to a weak Wi-Fi signal. Try to site your speaker closer to your main router if possible, or invest in a wireless range extender (such as Apple's AirPort Express) to relay the signal to the far reaches of your home. You can also try moving the router or speaker around.

7 Stream from your apps

You can almost always divert playback to an AirPlay receiver in this way, even in games. However, swiping upwards in games might show only a small handle at the screen's foot, like when playing video. Again, swipe upwards from the handle to open Control Centre.

8 Sharing options

You'll also find AirPlay among the options available to you when you tap the Share button in many apps, including Photos. This works in the same straightforward way: tap AirPlay, and in the list of targets, tap the video receiver on which to display the selected image or images.

Share music, books and apps

Create a Family Sharing group for your purchases

SKILL LEVEL

Anyone can do it

IT WILL TAKE

20 minutes

YOU'LL NEED

iOS 9 on each device; Apple ID for each user; a credit card linked to Organizer's Apple ID and iTunes account



Many families have several iPhones and iPads, and it's always seemed rather unfair that each person has

to buy their own copy of books, apps and games. After all, if you were using your family's games console, you could each take turns. You can sign in to Apple's stores using another person's Apple ID to read an ebook or play an album, but it's an unsatisfactory option.

iOS 9 includes a feature called Family Sharing, which lets up to six people share apps, games and books, plus

photos and a family calendar. It works for items you've already bought, and any group member can share content with any other person in the group. It's also a nifty alternative to having to buy iTunes gift cards, because you can link your children's accounts to yours and allow or prevent purchases.

You can't share everything. Some items are explicitly set to be non-shareable by the content provider. In practice, it's mainly older apps that have this restriction on them, and you'll find that most books, games and music you purchase from the iTunes and App Stores from now on can be shared. There's a limit of six people to a Family Sharing group, and 10 devices to which content can be downloaded (five of which can be computers).

Family Sharing lets up to six people share apps, games and books, plus photos and a family calendar



HOW TO | SET UP AND MANAGE A FAMILY SHARING GROUP



Family Sharing is the easy way to share what's important with members of your family.

[Get Started](#)

You will share iTunes, iBooks, and App Store purchases made using the Apple ID

Family members will be able to view and download your purchased music, movies, TV shows, books, and apps.

[Continue](#)

You can join now, or you can send an invitation.

[Ask \[name\] to Enter Password](#)

[Send an Invitation](#)

1 The Organizer account

Family Sharing needs to be set up by the Organizer – essentially the account holder and the one who will be responsible for paying for apps and games. You can either set up Family Sharing when first setting up your iPhone, or do so later by going to Settings > iCloud and tapping Family. An overview screen summarises what Family Sharing enables you to do. Tap Get Started to proceed and then confirm you want to use your existing Apple ID and account.

2 Confirm options

The Organizer manages the Family Sharing account and controls whether younger users can buy particular apps and games. Check and confirm the account's card details, then confirm that you accept responsibility for purchases made using it. You can then opt to share your location with group members using the Find My Friends app. This can be useful for keeping an eye on your kids' or their iPhones' whereabouts. Tap Not Now to skip this option.

3 Add members

To create your family group tap Add Family Member and type the email address of a person you want to add. Up to six people can be members of a Family Sharing group, but you can be a member of only one group at a time. If the person joining the group is with you, tap 'Ask [name] to Enter Password' and then get them to type in their Apple ID password on your iPhone. Provided they enter their credentials correctly, they will immediately be added to the group.

HOW TO | SET UP AND MANAGE A FAMILY SHARING GROUP (CONTINUED)

FAMILY MEMBERS

Rosemary Hattersley (Me)
Organizer

Invitation sent

Invitation sent

Add Family Member...

Family members share music, movies, apps, and more.

Rosemary Hattersley has invited you to Family Sharing.

[View Invitation](#)

Create Apple ID for a child

This will automatically add this child's account to your Family until the child is at least 13 years old. Use Ask to Buy to require approval for iTunes, iBooks, or App Store purchases.

To get started, you need to provide

4 Invite by email

It's likely that some people you want to add to the group are not on the spot when you want to set it up, so you'll need to send their invitations by email. Type an email address on the Add Family Members screen, then tap Send Invitation. Enter your Apple ID password when prompted. You'll then be taken back to the Family Members page, where you can instantly issue further invitations by tapping Add Family Members and entering each person's email.

5 Confirm memberships

Invitees will get an email outlining what Family Sharing is all about, with a link to confirm they want to join your group. They can join only if they aren't part of another Family Sharing group. Once they accept your invitation, you'll get an email, and their name will also appear in the Settings > iCloud > Family list. Tap the name of any adult in the group list and then toggle Parent/Guardian on if you want them to be able to approve Ask To Buy requests from a child.

6 Adding a child account

Under 13s must have their own Apple ID (they can't use yours), but you need to set up the account for them using your payment details. This must be a credit card rather than a debit card (credit cards can be issued only to those over 18), so you may need to switch the card you use for your Apple account at this point. Add their birthdate to control what age-appropriate content they can see. Now if they try to buy something, you'll be asked to allow or refuse it.

FAMILY PURCHASES

Lucy

MY PURCHASES

The Geneva Trap
Stella Rimington

DOWNLOADS

Family

Back Calendar

GMAIL

ICLOUD

- Home
- Work

7 Start sharing

You can immediately share books, apps and games with group members by tapping Purchased in the App Store and iBooks apps, and then tapping a member's name to view what they've bought. It can take a couple of minutes for the content to appear in the list, though. If you spot something in another group member's library that you want to use, just tap it to download it to your own iPad. You'll see a message on any items that can't be shared.

8 Share photos

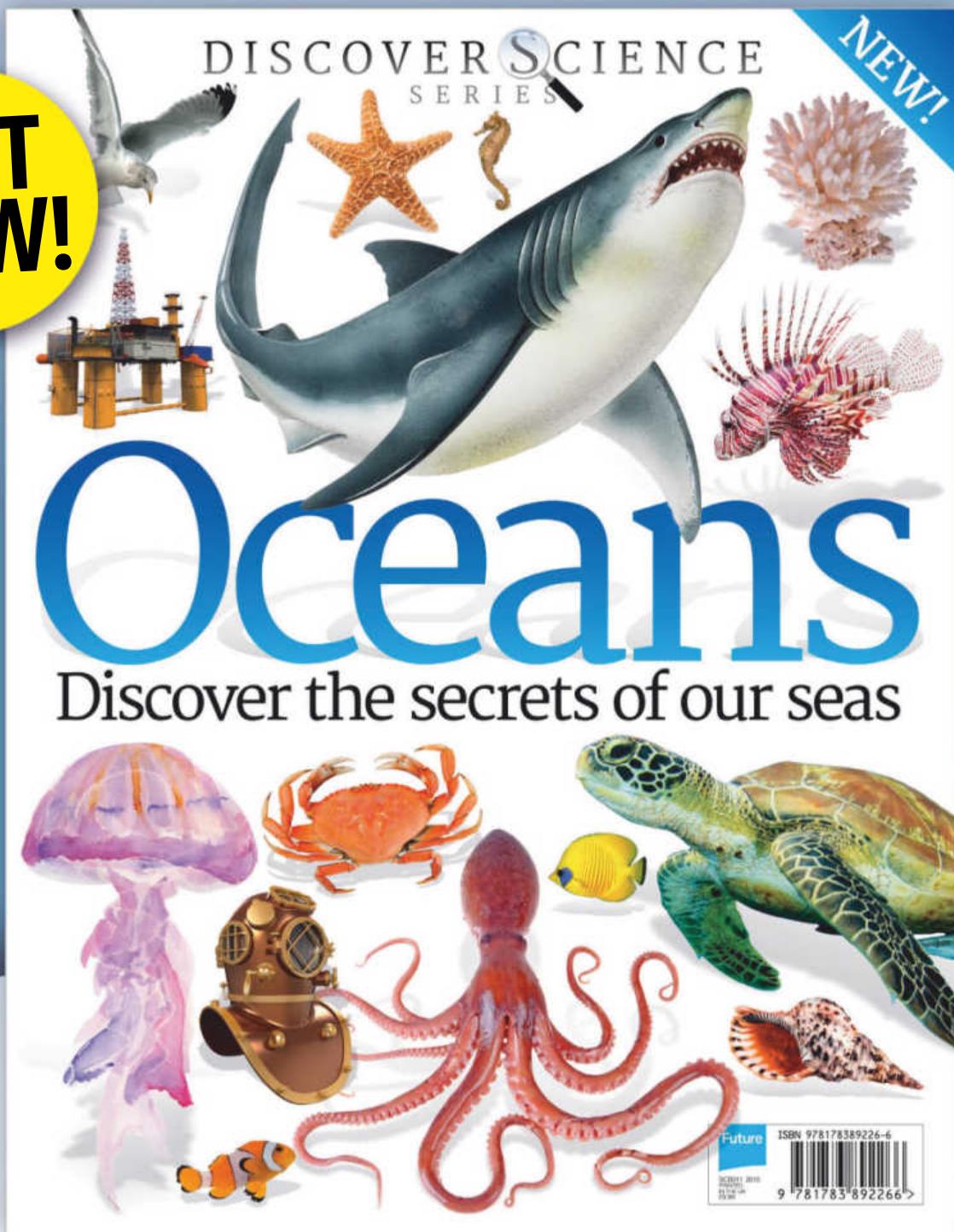
You can share photos with your group by turning on iCloud Photo Sharing in Settings > iCloud > Photos. Now go to the Photos app, tap Shared > Family and then the +. Tap to select any photos from your iPad's gallery that you want to include, then tap Done. Add a caption if you want, then tap Post. If you previously shared albums using the legacy Photo Stream feature, you'll see them alongside the Family and other shared albums within iCloud Photo Sharing.

9 Set up family events

Family Sharing is also very useful for reminding family members about get-togethers and other events. This works only if you have calendar syncing enabled in Settings > iCloud > Calendars. If this option is switched off, you must send an email invitation to attendees from within the Calendar app. With it on, go to the Calendar app, tap Calendars at the bottom, then the Family calendar to set who can edit events, and whether messages about changes are sent.

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Take a course with iTunes U

Find support materials or whole courses for you to study

SKILL LEVEL

Anyone can do it

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9



Your iPad is a powerful interactive education tool. It's highly portable, so you can use it in the classroom or almost anywhere else.

Even so, being a student isn't easy, especially when you get to college level and beyond. It's a huge financial strain to meet course fees plus living costs, before you even consider the price of textbooks and other support materials. Apple's free iTunes U can help a little here: it provides the largest collection of courses available

right inside this app that comes free with your iPad Air.

Set up in 2007, iTunes U was designed as a way for academic institutions to share content with their official students, but also to make those courses available worldwide for free. There are more than half a million tutorials, videos, books and other study materials ready to download at no cost, from a vast range of institutions, including high schools and universities around the globe, plus museums, libraries and more.

There are more than half a million tutorials, videos, books and other study materials

VISUAL GUIDE | FINDING COURSES ON iTUNES U

Find great courses all from the comfort of the iTunes Store

Categories

1 Tap here to view the available courses by category, so you can look through the options that relate to the subject you're interested in.

Library

2 Tap this to return to your personal library of course materials that you've downloaded, either on this device or synced via iCloud across all your devices.

Featured

3 Check out promoted courses, the most recent additions or see the most popular courses by scrolling down to the 'What's Hot' section.

Charts

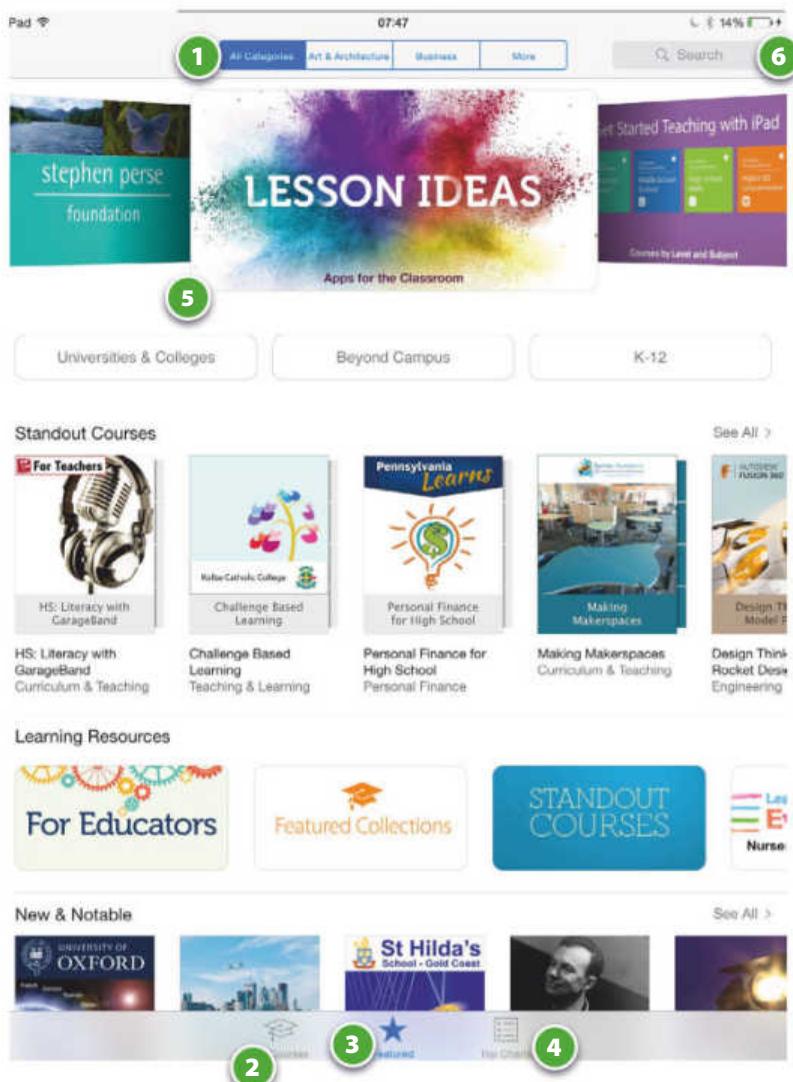
4 Not sure what you're looking for? Tap the button at the foot of the screen to see the most popular courses and collections listed in order of popularity.

Browse

5 Swipe rows and tap items in the middle area to investigate courses, which you can explore by level of study and by institution.

Search

6 Tap in the search bar and start typing to directly search the iTunes U catalogue by any keyword you choose.



Using Bluetooth accessories

It's easy to pair wireless kit with your iPad – here's how to do it

SKILL LEVEL

Anyone can do it

IT WILL TAKE

3 minutes

YOU'LL NEED

iPad, iOS 9,
Bluetooth-compatible
accessories

B

luetooth is a wireless communication system built into your iPad (as well as the iPhone and iPod

touch, for that matter) which can be used to connect it to a whole range of equipment, including headphones, earpieces, speakers and even keyboards.

The technology sends signals over radio waves, with the majority of devices able to transmit and receive over distances up to 10m (33ft), though it's normally used with accessories no more than an arm's length away.

The key thing to know is that to use any piece of Bluetooth kit with your iPad, the two first need to be 'paired', which authorises them to talk to each other. However, you need to pair a Bluetooth device to your iPad, iPhone or iPod touch only the first time you use it. After this, when that Bluetooth accessory is switched on and within range of your iOS device, it should connect automatically, ready for you to use again.

Do bear in mind, though, that your iOS device can only be paired with up to seven devices, but Apple suggests three or four as a practical limit. Also, one device that persistently transmits a high volume of data might mean you can't connect all of the other devices you would like to use at the same time.

A Bluetooth keyboard case protects your iPad and gives you a traditional mechanical keyboard to type with wherever you go.



You can sometimes simply select the accessory you want to use, but it's usually best to just switch off any others you might have paired. If you don't want to use a particular device again, you can unpair it. We'll look at how to do all this further on.

Choose the right accessory

Let's start, though, with choosing the right accessories. When choosing a piece of Bluetooth kit to buy, you need to know from the outset what you want to use it for and choose accordingly. This is important because accessories need to support different Bluetooth 'profiles' in order to perform their different functions. If you want to use an accessory to play music, for example, it must support the A2DP profile used for one-way transmission of audio, which is designed specifically for music. The Audio/Video Remote Control Profile (AVRCP) works in conjunction with A2DP to enable you to use the Bluetooth device to control the playback of music on your iPad, iPhone or iPod touch.

Bluetooth profiles

The iPad supports most of the main profiles (<http://apple.co/1MDREbb>), but note that not all Bluetooth accessories do – many earpieces don't do A2DP, for example, and hence can't play music well; not all Bluetooth stereo headphones include a microphone, and only those with a mic and support for Hands-Free Profile (1.5) can be used to make and receive calls, so this is what you'll need if you want to use the same headphones with your iPhone as well as your iPad. Using Siri over Bluetooth requires support for the BVRA profile. It's a bit of a

minefield, so read an accessory's specifications carefully before you buy to ensure you get what you need.

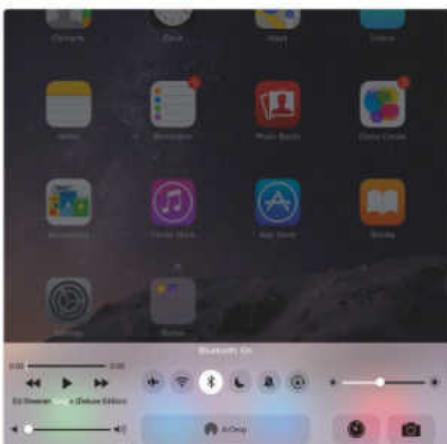
Using a Bluetooth device

It's easy to set up a Bluetooth accessory to work with your iPad. Go to Settings > Bluetooth and turn on Bluetooth. Power on your Bluetooth accessory and put it into pairing mode (sometimes called 'discovery mode') – your device might do this by default as soon as it's switched on for the first time; if not, its instructions will explain how. The device should now show up in the list on your iPad's screen, though this might take a little while as the iPad searches for nearby devices. Tap the device's name to pair it, and enter the passcode if one is required (if so, you should find this in the accessory's documentation as well).

Once your accessory is paired, it should connect automatically whenever it is switched on and within range of your iPad. Sometimes, however, you might want to bypass a paired accessory – for example, to play sound through your iPad itself instead of using speakers. The simplest option is usually to switch off the Bluetooth device, if you aren't actively using it with another accessory, such as a keyboard. Devices that aren't advertised as using Bluetooth LE (low energy) to connect can be power hungry, so doing this can extend your iPad's battery life as well.

If you want to use one accessory instead of another – a speaker instead of a headset, say – go to Settings > Bluetooth and tap the name of the accessory to use. Ultimately, you might find it simpler, to avoid conflicts, to switch on only those accessories you want to use. If you won't want to use a particular device again, you can unpair it: go to Settings > Bluetooth and switch on Bluetooth (if it's currently off), then tap the name of the device in the list and select Forget This Device. If you should later want to use the device again, simply pair it anew as before.

HOW TO | MASTER BLUETOOTH ON YOUR iPAD



1 Cases and controls

Cases such as the Belkin QODE Ultimate Keyboard Case for iPad Air 2 incorporate the same system of magnets as Apple's Smart Cover, so will put your iPad to sleep as soon as you close the cover. But the keyboard built into it works via Bluetooth, so you still need to pair it first, just like any Bluetooth keyboard.

2 Status bar indicator

The Bluetooth 'B' icon in your iPad's status bar will turn blue or solid white when something's connected to it. If Bluetooth is on but nothing's connected, it will be grey. If Bluetooth is off, the 'B' won't be there at all. To get started with a Bluetooth accessory, turn on Bluetooth in Settings or Control Centre.

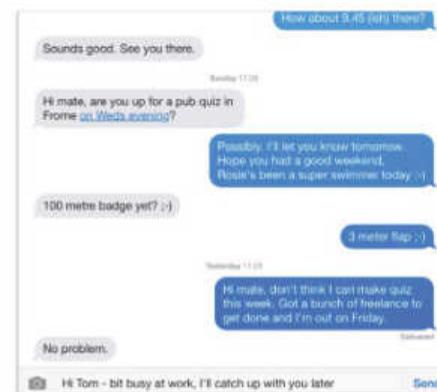
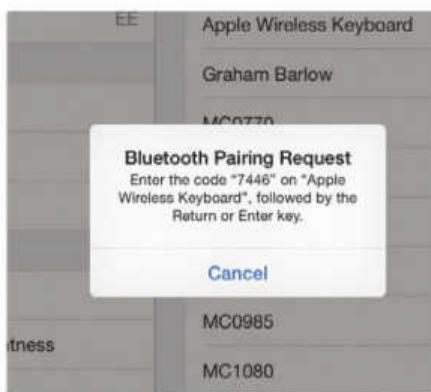
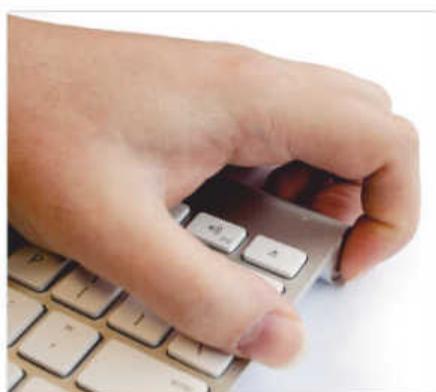
3 Free your tunes

To play audio through a compatible Bluetooth accessory, pair the devices, then open Control Centre. Tap the AirPlay button for a list of all your devices that are capable of streaming music – those that are Bluetooth have the familiar 'B' as part of their icon. Tap the name of your Bluetooth audio device to stream to it.

Use a Bluetooth keyboard with your iPad

The iPad's on-screen keyboard is fine for short notes or emails, but if you're writing a long document, for example, you might want to consider using a Bluetooth keyboard. You might already use one with your Mac or PC, and it's easy to pair it with your iPad too – and it will give you the familiar keyboard shortcuts for copying, cutting

and pasting, selecting text and navigating around your documents. Note that if you pair a non-Apple keyboard, you might have to use the Windows key instead of Cmd as the modifier key for actions such as cut, copy and paste. Also, you can pair only one keyboard at a time: if you want to change to another, unpair the first.



1 Enter pairing mode

Like all Bluetooth devices, the keyboard first needs to be paired with your iPad. See the keyboard's manual for how to do this. Many go into pairing mode as soon as you switch them on; with an Apple Wireless Keyboard you can also put it in 'discovery mode' by holding down its power button for a few seconds.

2 Pair with your iPad

On your iPad, go to Settings > Bluetooth and switch on Bluetooth. After a few seconds you'll see your keyboard appear in the list. Tap its name, and you'll be told to type a passcode on the keyboard. If you're too slow and the device leaves discovery mode, switch it off and on again.

3 Use your keyboard

That's it! You can now use the keyboard, along with many standard text-manipulation shortcuts, in place of the on-screen keyboard and gestures. To return to the iPad's on-screen keyboard, tap the physical keyboard's Eject key, or switch off the keyboard, or turn off Bluetooth in Settings or Control Centre.

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Writing with Pages

Powerful publishing is now even easier on the move with Pages

SKILL LEVEL

Could be tricky

IT WILL TAKE

20 minutes

YOU'LL NEED

iPad, iOS 9,
Pages



Pages ought to be an app that's just too cramped to be effective on the iPad's relatively small screen, but

Apple's magic shines through and it's a brilliantly intuitive tool for writing and page layout. Creating documents on your iPad is straightforward, largely, thanks to the templates provided and effective use of the touchscreen. Even better, Pages and the other two iWork apps, Keynote and Numbers, come free with all new iPads.

Pages can be used with your iPad held in portrait orientation, which is particularly suitable for writing letters and creating A4 posters, for example. However, you can also work with the iPad held in landscape if you prefer a screen orientation like you would get with a laptop or a desktop computer.

Helping hand

There's also plenty of room for creativity. You can start with a blank page, of course, yet there are also 63 pre-built templates for you to customise to fit the bill precisely. Don't like the headline typeface? Change it. Size and colour?

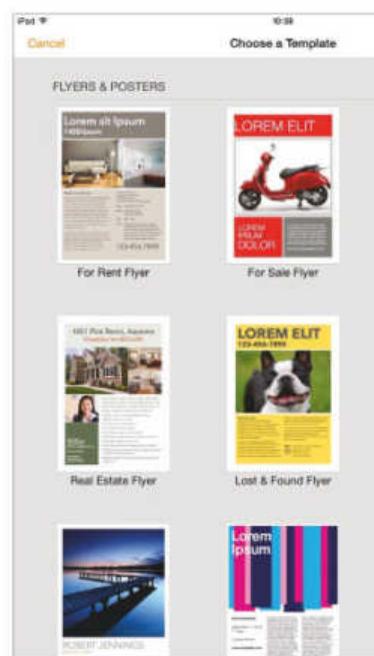
You can change those too. Images can be replaced with your own from the Photos app, and there are dozens of shapes to choose from to add to documents. The image masking feature, enables you to choose which part of an image to display in a box and masks out the rest. Instant Alpha enables you to erase unwanted backgrounds easily, and the Arrange tool enables you to choose how overlapping objects on the page are stacked to decorative effect.

Styles and options

The range of style options for objects is huge, too: you can choose from preset borders or create your own. There are, for example, four different drop shadow styles, plus simple reflection and opacity sliders for creating clever visual effects.

Text can be wrapped around images, and images can be fixed in place so that they don't move as you add text. Documents can be sent straight to an AirPrint-compatible printer, or saved to iCloud Drive to continue working on your computer, and you can share them by email, iMessage or AirDrop, even converting to PDF in the process.

Best of all, the use of simple gestures and tools for aligning objects make the iPad much more suited to the task than you might initially have thought.



Pages includes more than 60 templates including business and school reports, CVs and posters.



HOW TO | GET MORE OUT OF PAGES

1 Selecting text

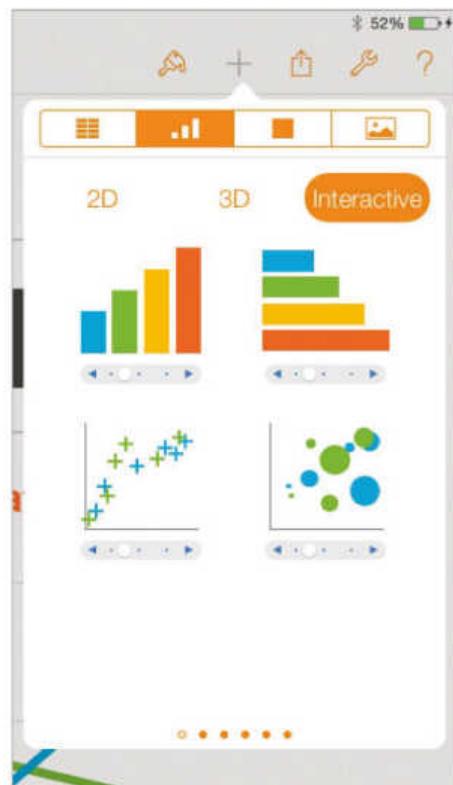
It's not immediately obvious how you select text in Pages. It's a little like using a mouse: you can double-tap to select a word, triple-tap to select an entire paragraph at once, or triple-tap and hold to select a paragraph and then drag up or down to select those around it. To select everything on the page, either tap and hold for a moment, then release and choose Select All in the bar that appears, or press **⌘ + A** on a paired Bluetooth keyboard. To adjust the range of your selection, just tap and hold one of the blue handles at the start or end of it and drag it with one finger.

2 Using the spellcheck

Misspellings are shown with a dotted red underline. To correct them, tap on the typo, then pick the correctly spelled word from the suggestions. If there's only one available suggestion, you'll be shown this as soon as you tap on a word, and can tap it to accept the correction. It will also tell you if there is no replacement available.

3 Undoing text errors

Sometimes you'll move an image accidentally or make a mistake while you're



To add charts in 2D or 3D, tap on the + icon, select Charts (the second icon), then tap on the type and style you want to add.

IMPORT DOCUMENTS

You don't have to use iTunes to laboriously sync documents to Pages on your iPad. If you don't have a Mac that works with AirDrop, send your documents as an attachment in an email to yourself.

On receipt of the email, simply tap and hold on the attachment for a second, and then select Open in Pages from the options that pop up.

typing. When an action can be reversed, Undo at the top-left of the screen lights up in orange. Tap it. If you decide you preferred whatever it was you just reversed, tap Undo again; this time a menu will offer a choice of undoing another action or redoing the one you just rolled back.

4 Adjust page margins

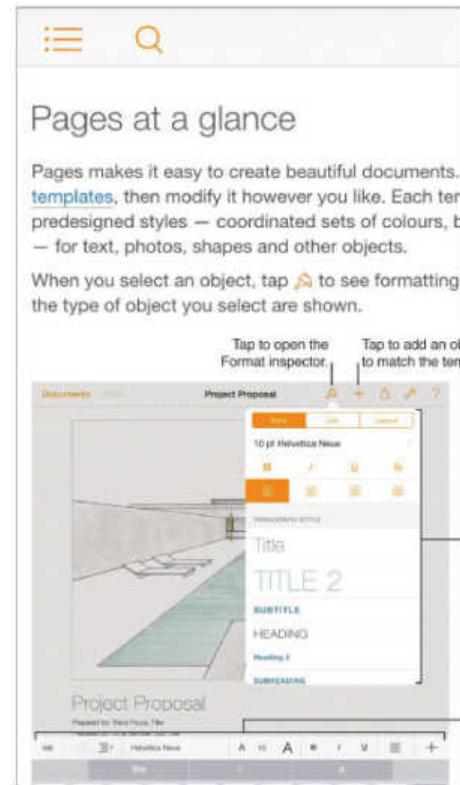
Tap some text to edit it and Pages will slide a ruler into view at the top of the screen, so you can see where tab stops are positioned. If the ruler doesn't appear, turn it on by tapping the spanner icon at the top-right corner, then Settings > Ruler. Tap somewhere on the ruler to add a tab stop, then drag the icon for the tab stop until it's where you want it. You can insert as many tab stops as you want. If you need it, a visual guide to tab stop icons is available by tapping the spanner > Help. Look for 'Set tab stops' in the table of contents.

5 Inserting a page, line or column break

To insert a break in your document – say, to create a new page without manually pressing Return several times – tap at the point where you want it to be, so that the keyboard appears. Next, tap the + at the top-right of the keyboard and pick the type of break to insert. You can also insert a comment (useful for notes to yourself and in collaborative working) or add a footnote to the current page.

6 Skim long documents

Even with the ability to flick your finger on the screen to scroll through a document, it could take a while to scroll through a long one. Thankfully, there is a shortcut: tap and hold your finger at the right edge of the screen and the navigator will pop up. You'll see a thumbnail preview of a page and its number, which changes as you slide your finger slowly up or down the screen. When you've identified the page you want, let go and the view will immediately jump to that page.



Need help? Simply tap the spanner icon, then select Help and you'll find a comprehensive, easy-to-navigate manual.

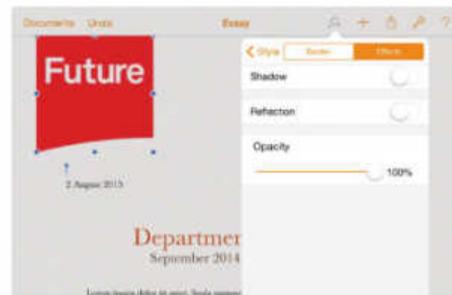
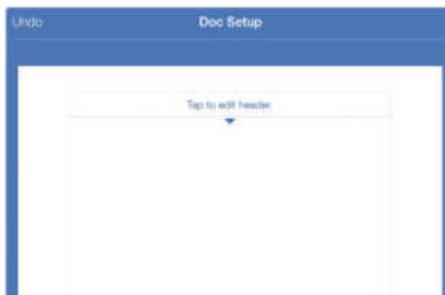
7 Cropping pictures

Is the picture you want to use the wrong size or shape for your layout? With the image selected, tap the paintbrush icon near the top-right corner of the screen, then the Image tab, then Edit Mask. This enables you to crop images, as well as zoom and pan the picture inside the mask you define – it's a bit like moving a huge poster around outside a window, except that you can alter the size of the window... and the size of the poster too, actually. Want to 'cut out' the subject in a shot? Tap Instant Alpha, then drag your finger across unwanted parts. The parts that will be removed when you let go are previewed in blue. Note that you can apply Instant Alpha repeatedly in small amounts.

8 Anchoring images

As in any desktop publishing suite worth its salt, you can anchor images and shapes so that they move with the text – usually referred to as 'inline' images – or remain fixed above the text, with the option of wrapping text around the graphic. Insert your image, and then tap the paintbrush icon. Tap Arrange > Wrap, and configure your anchor and wrap options from there (a little diagram helps describe the effect).

HOW TO | GO FURTHER WITH PAGES



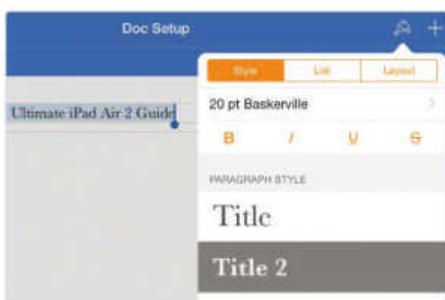
1 Undo/Redo

If you've spent ages typing out a long document only to delete a section by mistake, or if you've simply mistyped something, you'll want to be able to undo it. The word Undo is always at the top-left, but when an action can be redone, you can tap it for that option, too.



2 Adjust margins

Tap the spanner and choose Document Setup. Even if your document is landscape, the view switches to portrait to show the document's margins; hold and drag the arrows to adjust them. Alter the paper size by tapping Change Paper Size at the bottom of the screen.



3 Watermarks

To turn an image into a watermark, add it to a page, then tap the paintbrush icon and select Style > Style Options. Under Effects, drag the Opacity slider. Cut the image, go to Document Setup and paste it (into the header, footer or body) to have it appear on all pages.



4 Indents and tabs

Tap to select some text, then tap the spanner > Settings > Ruler. Tap on the ruler to insert a tab stop. Double-tap a stop to set its type: a diamond indicates centre-aligned, a triangle pointing left is right-aligned, and a circle aligns decimal points in numbers to it.



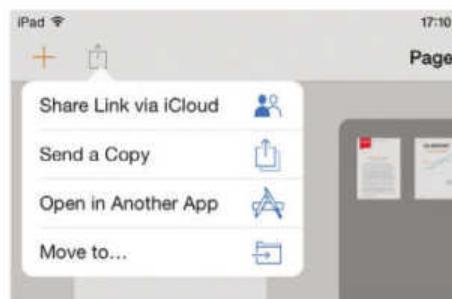
5 Headers and footers

Open your document, tap the spanner icon and then choose Document Setup. At the top and bottom of the page you can type in the little boxes. Tap a box, type your text and you're done. This adds it to the header or footer for every page (in that section) of your document.



6 Page numbers

To add page numbers, tap and hold for a second in a box on the Document Setup page. In the options bar that appears, choose Page Numbers. Select a style of numbering, then tap Done. You might need to add page numbering before header/footer text in the same box.



7 Tidy up

Once you have a number of documents, you can organise them into folders. In the list of them, tap and hold a document's preview or tap Edit, then drag one document over another to create a folder. Tap a folder's name to change it, and tap Done to stop organising documents.

8 Find text or documents

To find text within a document, tap the spanner icon, then select Find; tap the cog at the left of the search bar for more controls. To find documents, scroll up past the top of the list of them and tap in the search field, and tap the buttons to the right to sort by date or name.

9 Sharing documents

You can share a document either when you've got it open or from the list of documents. Tap the Share icon at the top, then choose how you want to share. If you pick Send a Copy or Open in Another App, you can convert it to PDF, Word or ePub format in addition to Pages.

180
PACKED PAGES



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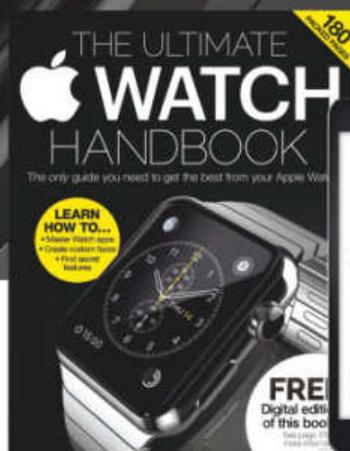
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Make great presentations

The easiest way to polish and deliver your presentations on the move

SKILL LEVEL

Could be tricky

IT WILL TAKE

25 minutes

YOU'LL NEED

iPad, iOS 9,
Keynote



Keynote gives you the ability to carry your presentations around on a lightweight device and connect it to a projector or TV using one of Apple's cables, which is much easier than lugging round a larger and often heavier device, like a laptop. Apple's AirPlay technology (see page 138) makes things even easier if the place at which you're giving a presentation has installed Apple TV in its meeting rooms or lecture halls – an increasingly popular, low-cost choice – then you can beam your presentation straight to a display without needing any cables at all.

Like Pages and Numbers, Keynote includes a large number of high-quality templates to get you started. Charts, tables, shapes and images can all be added to your slides with just a few taps on the screen, and you can import charts and tables from Numbers and

edit them directly in your slides, too. The app comes with a bunch of predefined styles for headlines, bullet points and body text, but you have control over typefaces, weights and sizes to make presentations distinctly your own.

The magic of Magic Move

Editing the content of a slide is one thing, but slick presentations need stylish animation, and Keynote provides it. Adding it to your presentation is as simple as tapping a slide in the sidebar and choosing from the list of transitions. When you tap the spanner icon, you'll find the output options familiar from Pages and Numbers, so you can easily create printed copies of your slides for attendees to refer back to. Alternatively, you can save paper by sharing a PDF copy by email.

The Magic Move option enables you to animate the movement of objects between slides, and you can specify how objects build in and out – that is, how they look when they appear and disappear as you step through your presentation. You can set builds and transitions, including Magic Move, to be

triggered by a tap or to occur after a set delay of your choice. Magic Move is far and away one of the most entertaining options available to you purely because of the versatility it offers, but also thanks to how quickly it can liven up a Keynote presentation. At its simplest, it creates an animated transition from the start position of an object on one slide to the end position you set for that object on the next slide. The effect is stunning and it can be achieved with just a few taps. You'll find yourself using it in almost every presentation you produce.

Possibly the most useful option of all, when you're actually delivering a presentation, is Presenter Notes. You can make your own notes for each slide and have them displayed on your iPad, like a digital cue card, while the presentation itself is shown on a connected TV or projector. Also useful is Keynote's ability to import PowerPoint presentations. You can even make those vital last-minute edits on your iPad right before delivering a presentation, and do it with a minimum of fuss thanks to how easy and efficient it is to make changes with gestures on the iPad's screen.

Magic Move enables you to animate the movement of objects between slides with just a few taps

HOW TO | GET STARTED WITH KEYNOTE

1 Add transitions between slides

By default, the slides that you add to your Keynote presentation don't have any transition styles applied to them. That is to say, when you actually play the presentation and advance from one slide to the next, it will simply cut from one to the other with nothing in between.

Keynote includes a range of transition styles. To apply one, tap the slide you want to transition from and then tap Transition on the menu that pops up beside it. Under Effects, pick one of the transition styles. If you want to preview a style, tap Play at the top-right of the list. Under Options, you can set things like the effect's duration and direction, and whether it plays after a tap or a certain amount of time.

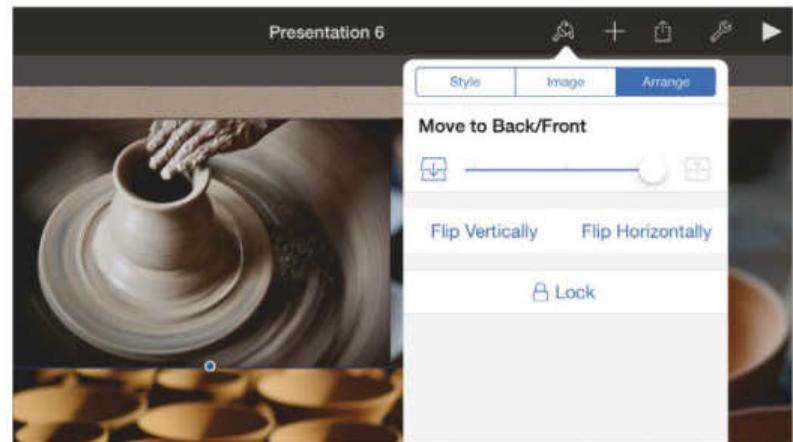
2 Magic Move

Create a slide with your text and images on it, and then tap the slide in the sidebar. On the pop-up menu that appears, tap Transition and then select Magic Move. This creates a duplicate of the slide. On the duplicate, move objects around, scale them, change their content and even apply build effects to them. When you play the presentation, Keynote will automatically generate dazzlingly smooth transitions between the corresponding objects on the two consecutive slides (or rather, the 'before' and 'after' states of the same slide).

3 Using Builds

As well as transitions between slides, you can use Builds to affect how objects on your slides – text, images, charts and more – appear on the canvas and disappear from it. You don't have to apply them, though. While every object you add to a slide can have both a Build In effect (how it arrives onto the screen) and a Build Out effect, don't feel you have to apply both or either. Applying only a Build In, for example,

When you've added several items to a slide, you might find that the wrong one is in front of another that you want visible. Tap either item, then the paintbrush icon, then the Arrange tab, and use the slider to move the item forward or back.

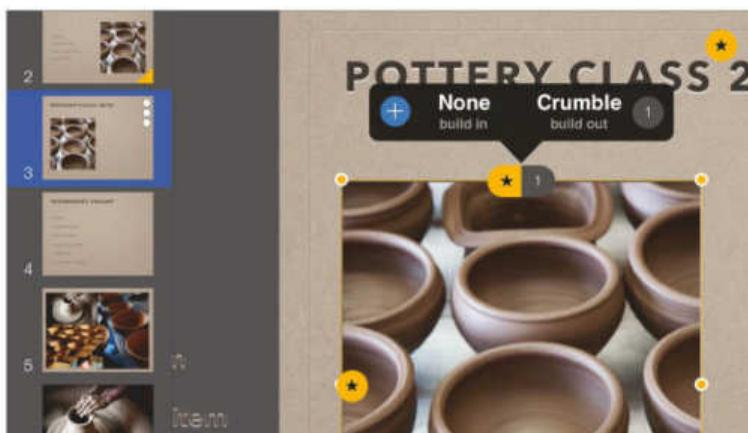


DESIGN OPTIONS

Keynote offers plenty of design choices for images in your presentations. Just tap on an object and then on the paintbrush icon to access an impressive range of border styles and effects. From here you can also manage masks, flip images and change how they're stacked. Tap the spanner for even more features, such as using an iPhone as a remote control.

could bring on a sequence of bullet points. You don't have to build out the block of text, though, because you might be happy for the entire slide to change when you advance.

To apply a build effect to an object, tap the object and, in the pop-up menu, tap Animate and then 'build in' or 'build out'. Tap the one you want and then choose an effect for your text or object. At the top-right of the list of effects, tap Play to get a preview of how it will look on your slide, and then return to the effects list so you can either try out another or make fine adjustments to the one you've chosen.



Magic Move creates a smooth transition between the start position of an object on a slide and the end position to which you move the same object on a duplicate of that slide (slides 2 and 3 here). It can include any Build effects you might add. Stars indicate objects that will be animated by Magic Move.

Tap through the tabs at the bottom of the effects list to make those adjustments, including duration and direction. Notice that you can have build effects happen simultaneously or in a sequence, and set them to be triggered automatically after a delay, or by tapping the screen – there's a lot to explore.

4 Organising slides

To reorder slides, simply tap and hold on the one you want to move, and then drag it to a new position and let go. Want to keep a slide but not present it? Just tap it and choose Skip; to reverse this, tap the line that indicates a skipped slide and choose Don't Skip.

You can group slides simply by tapping and holding on one slide (or select several of them by tapping and holding on one, then tapping the others you want to select) and then dragging them a little to the right under another slide. Now, tap the arrow at the left of the 'parent' slide to collapse or expand the group. Slides can be 'nested' several levels deep.

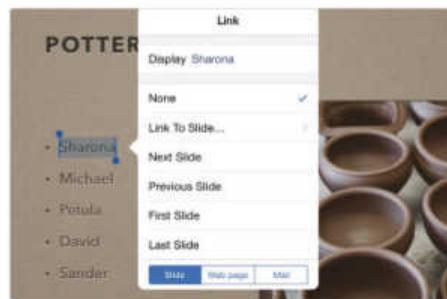
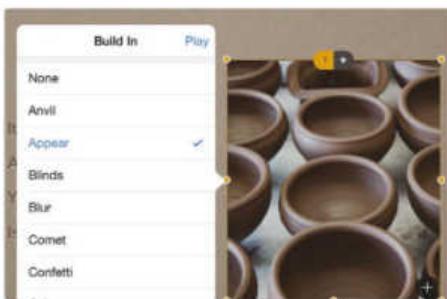
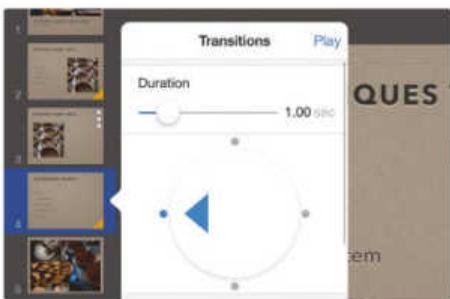
5 Presenting your slides

To present your slides, tap the Play icon (the right-pointing arrow) in the toolbar. The presentation will switch to full-screen playback and you can navigate through it by tapping, or you can swipe leftwards or rightwards to advance or move back. Pinching together two fingers on the screen ends the slideshow.

We mentioned earlier that you can present your work on a big screen by using AirPlay and an Apple TV, or with a cable – one of Apple's Lightning to VGA or Lightning to Digital AV (HDMI) adaptors, which cost £40 each.

Presenting from an iPad has another lovely little touch: tap and hold anywhere on its screen and a red-and-white point appears at that position on the external display, enabling you to direct your audience's attention to something.

HOW TO | GET EVEN MORE FROM KEYNOTE



1 Transition styles

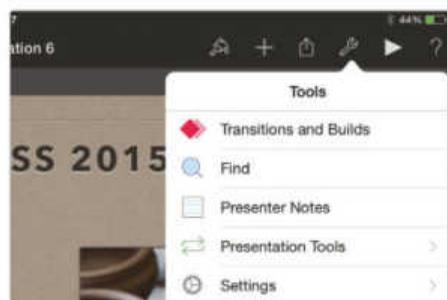
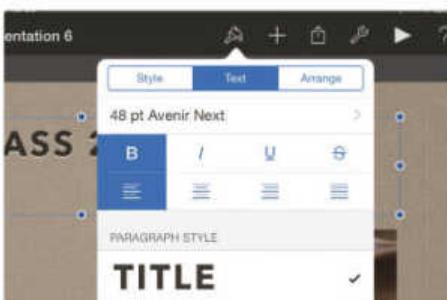
To add a little flair to presentations, you can add transitions between slides – pick from a range of dissolves, fades and artistic effects. Tap on the slide you want to transition from, then tap Transition. Select an effect style, then tap Options to set its duration or other settings.

2 Add build effects

You can also animate individual items on a single slide, adding a build in or a build out effect, or both. Tap the item – picture, text box, shape or whatever it may be – and then tap Animate. A build in effect determines how an item is revealed, and a build out how it departs.

3 Add interactive links

Tap on the spanner icon (top-right), then Presentation Tools > Interactive Links and then tap an object or selection of text on the page. You can now link it to another slide, a web page or an email address from the tabs at the bottom of the pop-up box. When you're done, tap OK.



4 Working with masks

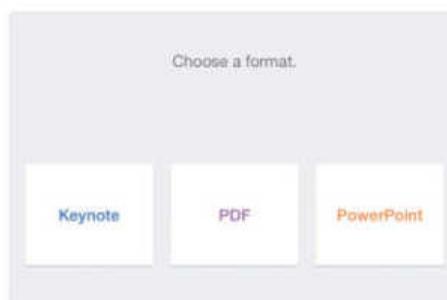
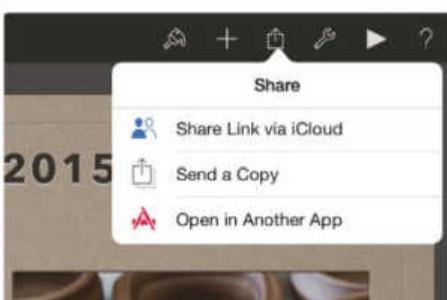
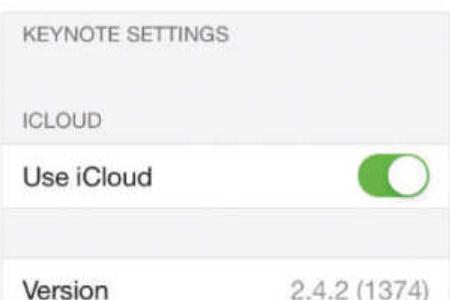
To crop an image or display a certain area of it, you need masks. Tap the image you want to edit, then tap the paintbrush icon and choose Image > Edit Mask. Use the slider to adjust the image zoom. Drag the image to move the area you want to see into position within the frame.

5 Handling fonts

To change the appearance of text, select a box or a range of text within one, then tap the paintbrush. Under Style (or Text if you tapped a box), you can add decorative effects, change alignment, and apply predefined styles. Tap the font name to change it or its size or colour.

6 Add Presenter Notes

You can view Presenter Notes on your iPad's display so only you see them. Tap the spanner icon, choose Presenter Notes and enter your text. Do this for each slide. To view your notes you need to be in Presenter Display mode, activated if connected to an external display.



7 Export a presentation

To get your Keynote presentation on all your devices, ensure that iCloud is enabled. Go to Settings > iCloud and check you're signed in and that iCloud Drive (or Documents & Data) is turned on. Go back up a level, scroll down and tap Keynote, and enable the Use iCloud option.

8 Sharing options

Now in Keynote, within a presentation or at the list of all presentations, tap the Share icon. You'll see a few options. You can send people a link to the file on iCloud, enabling anyone with the link to open and edit it – unless you set a password, which is done from the spanner icon.

9 Choose a format

When sharing a copy, choose whether to convert your presentation to PowerPoint or PDF format, then pick how you want to send it. If you tap Open in Another App you get the same format conversion options, then a choice of apps on your iPad that can open that format.

Keep track of your finances

Use Apple's spreadsheet app to manage money and much more

SKILL LEVEL

Could be tricky

IT WILL TAKE

15 minutes

YOU'LL NEED

iPad, iOS 9,
Numbers



On the surface, Apple's spreadsheet app looks much like any other. It presents numerical and other information in columns and rows, and it saves you a lot of time when calculating things to forecast your finances. Don't be deceived by your first impression, though – just like Pages and Keynote, Numbers is surprisingly delightful to use on the iPad's touchscreen. Apple has put a lot of work into making Numbers not just practical, but also beautiful in its visualisations of your data.

Like other spreadsheet apps, your documents can contain multiple sheets, which are shown as tabs across the top of the iPad's screen. This enables you to work with pretty complex sets of information. More unusual is that each sheet is treated like a blank bit of paper on which you can add one or more tables – Numbers' name for the columns and rows into whose cells you enter data.

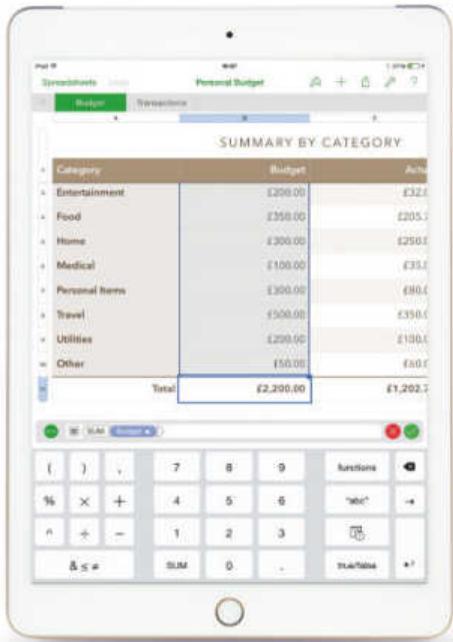
The + button, at the left of the tabs that represent your sheets, is used to add more of them. When tapped, it also offers the option of adding a new form, which can be linked to any table in the same document. Then, instead of having to type values into cells on the table, you punch them

into the bigger boxes on the form, as if you were adding to a database. It makes the process of updating tables on a relatively small screen much easier than you might assume.

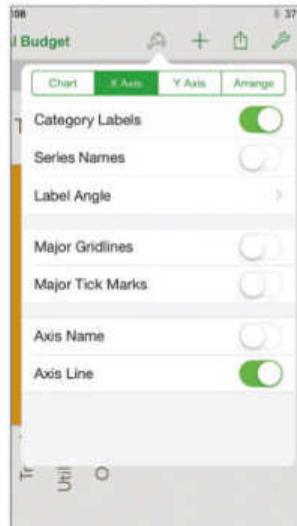
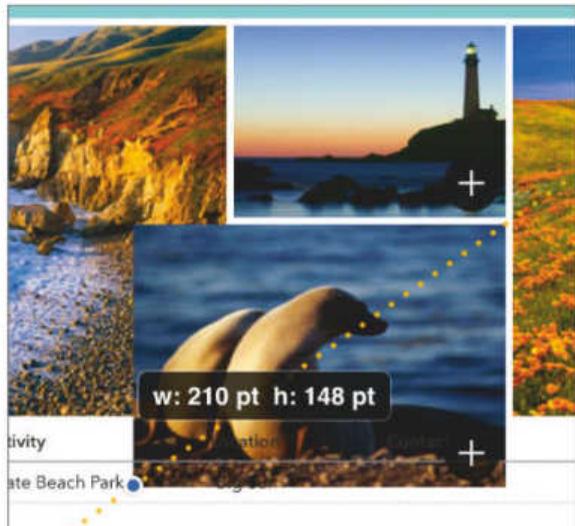
Numbers' range of charts and graphs is excellent. You can pick from horizontal or vertical bar charts, line graphs, pie charts and scatter graphs, and tailor their colours. Once you've chosen a type to use, populating it requires nothing more than selecting the cells that contain the data you want to use by dragging your finger over them – and, of course, you can edit both the content and the style of titles, labels and legends for charts.

To enter data in a cell, tap on it twice. Numbers' context-aware keyboard, which changes depending on a cell's formatting, slides into view. You can format a cell's contents by tapping on the relevant icon above the keyboard: 'T' for text, '42' for numerical data, '=' for a formula, or the clock symbol for time or date.

To set how data is presented – how many decimal places are shown, or whether a number is a percentage, for example – tap a cell to select it, then tap the paintbrush in the toolbar followed by Format. All in all, Numbers makes it easy to enter data and manipulate it on your iPad.



Numbers is about much more than just figures: you can place multiple tables and charts anywhere on the canvas; you get suggestions as soon as you start typing a formula; and you can create interactive charts to display and manipulate data in just a couple of taps.



FAR LEFT Brighten your tables with a logo or an image, or just add some attractive pictures. Drag the corner points to scale the image.

LEFT You can label the axes of a chart from the paintbrush icon, and you can even set an angle for the label.

RIGHT The use of forms in Numbers makes entering large amounts of information as easy as it gets.



HOW TO | GET THE MOST FROM NUMBERS

1 Using the templates

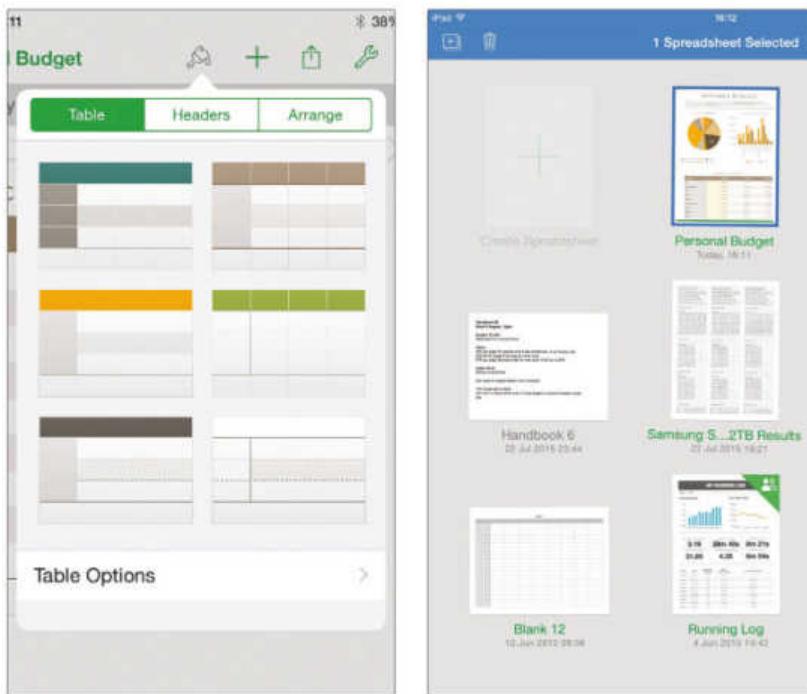
Before you go hunting around the App Store for apps that perform mathematical tasks, be sure to investigate the 30 templates included with Numbers. They address lots of everyday tasks, such as budgeting and mortgage calculation, and are ready to be customised to your own needs. In fact, Numbers is good for a whole load of other things as well, as you can see from some of the starting points supplied by Apple. Among them, you'll find templates here to organise sports teams, check attendance within a class or group, and even plan meals or holidays.

2 Entering formulae

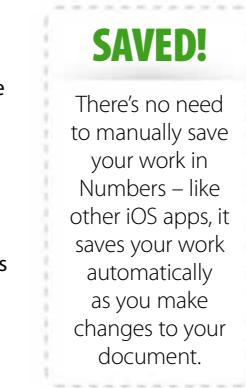
To enter a formula, double-tap on the cell into which you want to enter it. In the formula bar that appears above the on-screen keyboard, tap the = symbol, then 'functions' on the keypad. Now explore the categories to find a suitable formula, tap it to enter it into the cell. In the formula bar, tap the pill-shaped placeholder that represents an input value for the function, then tap or drag through a range of cells whose contents you want it to reference. If you're unsure what a particular function does, you can tap the 'i' icon to the right of its name for an explanation and for an example of its usage.

3 Adding more cells

It's not immediately obvious how you add more rows and columns to a table in Numbers, but it's actually easy. Tap the table, then to add a single row or column, tap and drag the little circle that contains two lines, just below the last row



Besides Numbers' many templates, you can refine the appearance of your spreadsheets with options such as adding a title and border to a table.



When you tap a cell, its column and row names in the bars at the top and left of the table turn blue; tap on a column or row name to select all of the cells in that column or row. Whatever is selected is shown with a blue highlight around it, and one or more blue dots around that highlight. Drag from a dot to adjust the range of cells that is selected. To move the contents of those cells – or, when building a formula, to shift the whole range that is selected – tap and hold within the highlighted area for a moment, let go and then drag from within it.

and to the right of the last column. You can drag these up or left to remove empty rows or columns, respectively.

4 Sorting data in a table

Start by tapping once on any cell in the table whose data you want to sort. This reveals the column and row names. Tap on the name of the column that contains data upon which you want to sort a table. In the options bar that then appears, tap Sort and then choose either Sort Ascending or Sort Descending.

5 Using Table Options

You can use the formatting menu to change both the appearance and the behaviour of tables. Select an entire table by tapping it once, then tap the circle at its top-left corner, followed by the paintbrush icon in the toolbar. Be sure to explore the Table Options submenu for settings that can help make your table look great – including options for turning off grid lines and alternating row colours to aid readability.

6 Creating forms

To make forms for data entry, start by creating the table that will receive the data. Take care to first select the empty columns and apply formats such as star ratings, checkboxes or dates so the data will be stored and presented correctly, then tap the + near the top-left corner of the screen and choose New Form. Find and tap on the table you want to link to the form. Any data that's entered into the form will be flowed automatically back into the spreadsheet.

6 Adding pictures

Don't forget that you can add pictures to your sheet alongside tables and charts. As well as just brightening up your spreadsheet, you could use this to add, for example, your company logo to give a professional appearance to an invoice you've created, or to your business' financial results.

Share with AirDrop

Share things directly with the people around you

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

A recent iOS device running iOS 8 or 9, and either another, similar iOS device or a Mac running OS X Yosemite or later

A

irDrop is a convenient way to share things with people nearby: it establishes a direct, encrypted, short-range connection between iOS 8 and 9 devices and Macs running OS X Yosemite or later.

Perhaps you want to send a friend a picture taken using your iPad, privately rather than posting it on Facebook, or perhaps you want to pass on someone's contact details or share a web page you've found. It takes only a few taps, and you don't have to connect to a Wi-Fi network or type the recipient's email address.

However, AirDrop has some restrictions. It works only between recent devices. If your iOS device has a Lightning connector, it is new enough to support AirDrop. Mac models that work with AirDrop are listed at support.apple.com/kb/

PH18947, and they need to be running OS X Yosemite or later.

The ability to share over AirDrop is also built into many iOS apps. You can share a link to a web page, photos, notes, your current location or directions, and other documents and data from apps downloaded from the App Store. Beware of exactly what you're sharing, though: while you can share your own or someone else's details from the Contacts app, there's no way to restrict which details are sent.

The ability to share over AirDrop is built into many apps – share web links, photos and notes



HOW TO | SET UP AIRDROP



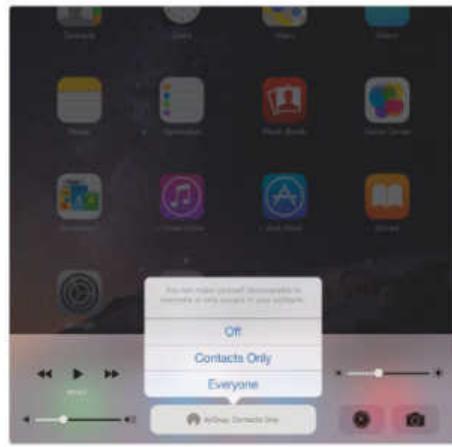
1 Import profile pictures

If you don't have photos for many of your Contacts, open Settings and tap Facebook or Twitter. If you're signed in to either network, tap the option to update contacts. Where iOS is able to match your contacts with your online friends, it'll download profile pictures to the relevant contacts. You'll then see those pics in AirDrop instead of a rather more boring placeholder.



2 Share with friends

Swipe up from the screen's bottom edge to open Control Centre (unless you've disabled this – see page 40). Tap AirDrop, then Contacts Only. Bluetooth and Wi-Fi will be turned on, if they weren't already on. If you turn off either, AirDrop will also be switched off. You and your nearby contacts whose devices are signed into an iCloud account are now visible to each other.



3 Share with everyone

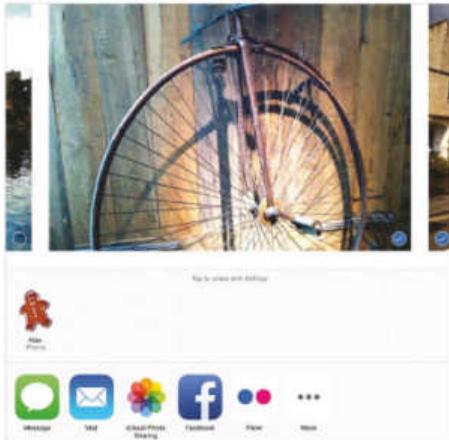
To share with people who aren't among your contacts or don't use iCloud, tap Everyone. Beware, though: AirDrop is enabled whenever both Bluetooth and Wi-Fi are switched on, and anyone will be able to send you iffy pictures, which are previewed even when your device is locked. Best keep AirDrop off and switch it on only when you specifically want to be visible.

HOW TO | SHARE AN ITEM USING AIRDROP



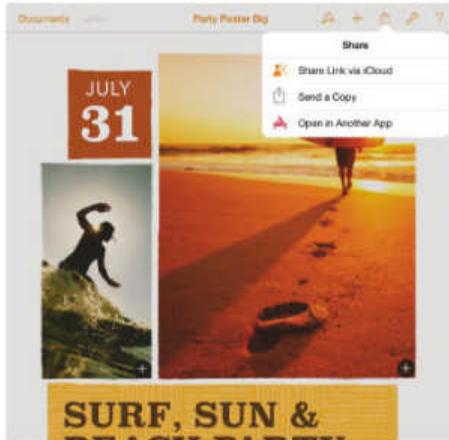
1 Share a web page

In Safari, tap the Share button. In the pane that appears, the top row shows nearby people who have made themselves visible to you over AirDrop. If you can't see your desired recipient, ask them to open Control Centre – we've found that this rebroadcasts a person's availability within a few seconds. Tap their icon when it appears and wait for them to accept.



2 Share a photo

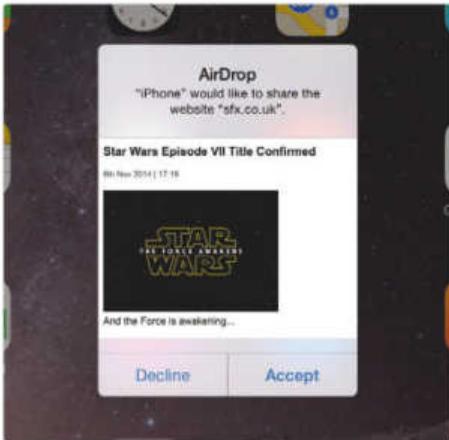
In the Photos app, view the image you wish to share and tap the Share button (bottom-left). Alternatively, in Moments view, tap Select at the top right, tap several photos, then tap the Share button. The usual panel opens either way, but the first method also shows your photos in a scrolling strip, so you can select more without going back. As before, tap the desired recipient.



3 Sharing in other apps

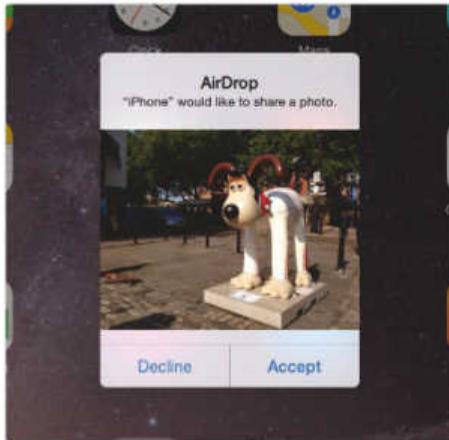
Details vary in other apps. At the foot of each entry in the Contacts app, for example, is Share Contact; but Pages, Numbers and Keynote are more convoluted. In those apps, open a document, then tap the Share button at the top-right and choose Send a Copy. Tap the file format in which to share the document. In the familiar panel that appears, tap the recipient.

HOW TO | RECEIVE SOMETHING VIA AIRDROP



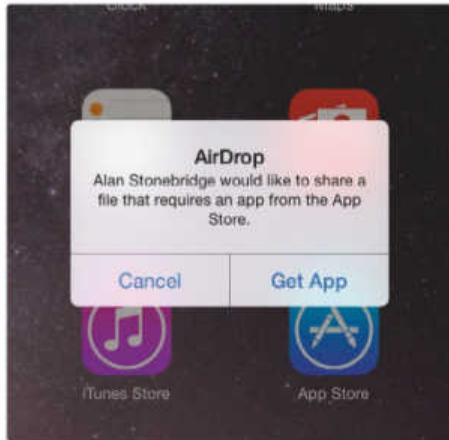
1 Receiving web links

If someone wants to share a link to a web page, you'll see a preview. If you accept, it opens in Safari. If you decline, the sender is informed of that; if something goes wrong, 'Failed' appears. If your device is locked, you'll see a smaller preview of what's being sent to you. Swipe across it to unlock your device and see a larger preview before accepting or rejecting the item.



2 Receiving photos

If someone tries to share photos, you're told how many there are but only one of them is previewed. (There's no discernible pattern to which one this will be.) Accepting adds the pictures to your photo library and takes you to them in the Photos app. They're also uploaded to your iCloud Photo Library if that feature is enabled in Settings > iCloud > Photos.



3 Receiving from apps

You won't see a preview of items sent from apps you don't have (though photos sent from apps such as Camera+ are simply directed to the built-in Photos app). Instead, the AirDrop alert offers the option to reject the item or to go straight to the required app in the App Store. You'll have to tap through to see whether it will cost you money, if the sender can't tell you.



Some of the latest printers from leading makers such as Canon, HP, Epson and Brother come with support for AirPrint built-in.

Print from your iPad

Run off copies of your photos or documents from your iOS device

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5-10 minutes

YOU'LL NEED

iPad, iOS 9, an AirPrint compatible printer, or the Print n Share app

Thanks to the portability of devices like your iPad, you don't need to carry printouts around with you to work on the move or show people your photos. Sometimes, though, you need a hard copy of something – minutes from a meeting for colleagues, a photo from your last trip that you want to put on a wall, or whatever it may be. The simple solution is a built-in feature called AirPrint, which enables you to print directly from your iPad or other iOS device to a compatible wireless printer.

The list of compatible hardware is ever increasing, and almost all major printer manufacturers are releasing AirPrint-compatible models these days. There's a list of all AirPrint printers that are currently available at <http://bit.ly/AirPrint101>, along with more information about how it all works.

As befits the iPad, AirPrint is wonderfully simple to use. If you've got an inkjet printer, multi-page documents are even printed with the last page delivered first, so the final stack of paper is in the right order for you to pick up and take away.

AirPrint's real benefit is that you don't need any extra driver software or apps in order to print – you simply need to set up your printer on the



In most apps, when you tap the Share button, Print will be among the options on offer in the bottom row.

same Wi-Fi network as your iPad, iPhone or iPod touch, and use the Print option available in many iOS apps, including Photos and Mail, typically by tapping the Share button. Your device will automatically detect the printer on your network.

But what if you've got a printer you're happy with that isn't AirPrint-compatible? There is a solution: install an app called Print n Share (£2.99). This will enable you to use any printer attached to your Mac or PC. You'll need to install a free helper utility called WePrint, which is available for Mac or PC from <http://mobile.eurosmartz.com>. This enables your iOS device to relay jobs to any printer that's connected to the computer via USB or Bluetooth, or Wi-Fi even if the printer

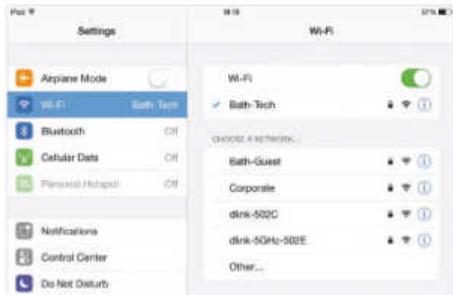
AirPrint enables you to print from your iPad or other iOS device to a compatible wireless printer

itself isn't designed for AirPrint. It even enables remote printing, so a job can be ready for you when you get home.

Printing from some apps isn't as straightforward with Print n Share as it is with AirPrint: from Pages, for example, you need to send the print job to Print n Share first; and if you want to print email attachments, the app needs to be set up to check your email account. Once that's done, the app does more than AirPrint alone, and extras such as file sharing via Dropbox, Google Drive and other services are built in.

A word of warning: Apple's Airport network products include an option to make a USB or Ethernet printer available for wireless printing, but this isn't the same thing as AirPrint. Macs and PCs are able to use a printer connected to an Airport device – your iPad and other iOS devices can't.

HOW TO | PRINT WIRELESSLY FROM YOUR iPAD USING AIRPRINT



1 Set things up

Your iOS device and AirPrint printer need to be connected to the same wireless network. On the iPad, check the network details under Settings > Wi-Fi, and connect your printer to the same network. How to do this may differ for each printer, so check the manual for help.



2 Pick something to print

More and more apps are adding the option to print. It's usually in the Share menu, but not always. In Mail, tap the Reply button to find the Print command. To print a web page, open Safari, go to the site you want, and tap the Share icon at the top left of the screen.



3 Tweak the settings

Swipe right to left on the bottom row of icons to find the Print button, and tap it. Tap Printer and your iOS device searches for AirPrint-compatible printers on your network. Select the one you want to use; it will now be your default. You're now taken back to the print settings.



4 Extra options

You may see extra options here, such as double-sided printing, depending on your printer model. The least you will see is an option to specify the number of copies of your document that you want to print. By default, this is one; tap the + if you need more.

Printing to "Epson Stylus SX535WD"

Sending to Printer...

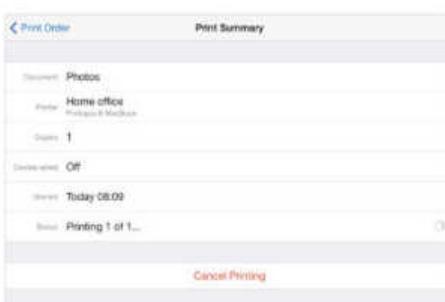
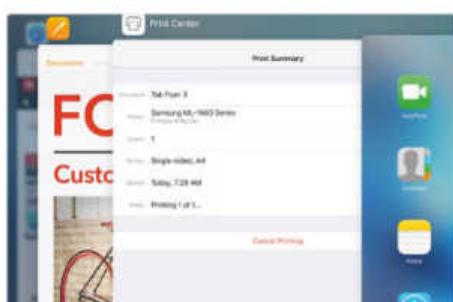
PRINTER APPS

Many leading printer manufacturers have released apps to go with their wireless printers, and they're usually free. For example, Canon's Easy-PhotoPrint (pictured here) lets you queue photo prints and scan directly to your iOS device, and Kodak's handy Pic Flick app lets you print your photos to any compatible Kodak printer. Check your printer's documentation or the App Store to see if an iOS app is available for it.



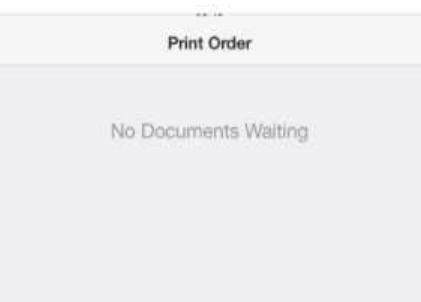
5 And... action!

Now tap Print to send your document to your AirPrint printer. A box on your iPad shows progress in sending; how long this takes can vary with the strength of the signal and what you're printing. Once it's transmitted, you're returned to your app.



6 Print Centre

To keep an eye on how things are going after this, double-tap the Home button to open the App Switcher. Swipe from left to right until you see Print Centre. This appears only when you're printing, and it is always situated at the far left of the row of apps.



7 View your progress

Tap the Print Centre icon to view details of what you're printing. At the top you see each document name, followed by the printer, the number of copies to be printed, and whether you've chosen any other options. The last line tells you how many pages have printed so far.

8 Cancel printing

If you change your mind or realise you're printing the wrong thing, it's not too late to stop. Tap the relevant job in Print Centre, then tap Cancel Printing at the foot of the screen. This will send a signal to the printer to abandon that print job. Any other jobs should continue.

Be more mobile with Handoff

Start on one device and finish on another

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

iPad, iOS 9, OS X Yosemite, apps that support Handoff



Handoff is one of the 'Continuity' features in iOS 9 and OS X El Capitan, and it may well be the one you'll use most often. It enables you to start a task on one device and easily switch to another to finish it. Perhaps you want to take a web page you're reading, or the email you're writing on your iPad, and finish it on the larger screen and keyboard of a Mac, or even on your iPhone. There are other ways to do that – in these scenarios, iCloud Tabs and your Drafts mailbox would help – but Handoff makes the process quicker.

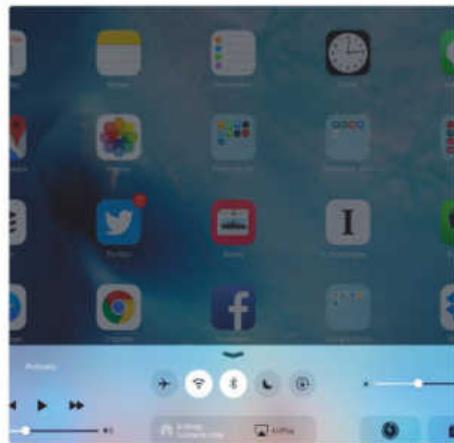
Devices signed into the same iCloud account, in close proximity, and with Bluetooth turned on, can tell each other what app they're working with. If you're writing an email on one device, the others will display their own Mail app's icon. Interacting with that icon tells the originating device to hand the task – including the email you're writing or a document in, say, Pages, Numbers or Keynote – to the device you're now using. The task can be picked up on whatever device you deem suitable in that

moment, as long as it has the corresponding app. This isn't limited to Apple's apps, though, as developers can add support for Handoff to their apps, too.

Handoff enables you to start a task on one device and easily switch to another to finish it



HOW TO | GET STARTED WITH HANDOFF



1 Prerequisites

On your iPad, open Settings > General > Handoff & Suggested Apps to confirm that Handoff is switched on. In System Preferences > General on a Mac, check 'Allow Handoff between this Mac and your iCloud devices'. Compatible devices (<http://apple.co/1HeH827>) need Bluetooth on to discover each other, and Wi-Fi on to connect directly and transfer the task.



2 Lock screen

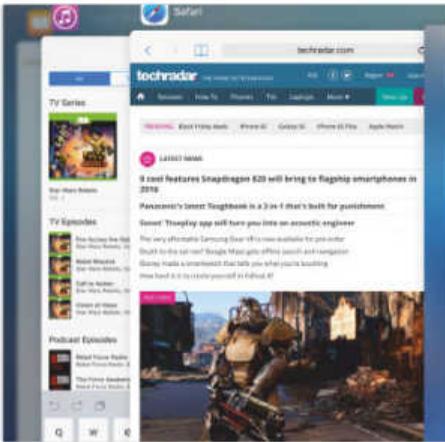
Even when your iPad is locked, it will recognise when it can take over a task from another of your devices. Open a web page in Safari on another device and, while Safari is the foreground app on that device, you'll see that app's icon at the bottom-left corner of the Lock Screen on your iPad. Switch to writing a message in Mail and the icon will change instantly.



3 Receive the task

Swipe upwards from the app icon, and unlock your iPad with your passcode or Touch ID if requested. The app will open and display the same page, email (one you were writing or reading) or other content that you were working with on your other device. You may have to scroll to reach the same place. Editable content, such as a new email, will close on the other device.

HOW TO | USE HANDOFF



1 App Switcher

When your iPad is already unlocked, Handoff is accessed through the App Switcher. Double-click the Home button and swipe to the leftmost item until you reach the Home Screen. An extra item appears to the left when Handoff is possible, showing the receiving app's icon and the device from which it will take over. You can tap this even while it's hanging off the screen.



2 Receive on a Mac

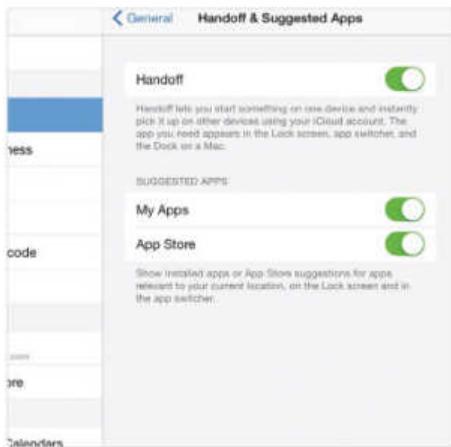
Handoff can be used to complete a task on a Mac that was started on one of your iOS devices, too. When a Mac app can take over, its icon is displayed in your Dock, to the left of the Finder, with a small graphic of an iOS device at its top right. Move the mouse pointer over this for confirmation of the sending device's name, then click the icon to begin the handoff process.



3 An alternative method

If your Dock is hidden to increase screen space, there's another way to invoke Handoff. Hold ⌘ and tap the \rightarrow key to open the App Switcher. The receiving app's icon is displayed at the far left. With ⌘ still held down, also hold ↑ , then tap \rightarrow twice to highlight the app and release the keys to start Handoff. Alternatively, move the pointer over the icon and let go of ⌘ .

HOW TO | USE SUGGESTED APPS



1 Check your settings

The same method of showing an icon when a task can be moved from one device to another is also used to suggest relevant apps based on your location, such as in Apple Stores, Starbucks, and other retailers and venues. Go back to General > Handoff & Suggested Apps in your iPad's Settings app to find two switches for this, labelled My Apps and App Store.



2 Apps you already have

The My Apps switch allows the icon of an app you have already installed on your iPad to be displayed when it is relevant to your location, such as when you're in an Apple Store. The app's icon will appear in the same places used by Handoff – to open the app, swipe up from the bottom-left of the Lock screen, or open the App Switcher and tap the app's icon (far left).

3 Apps you may want

If the App Store switch is enabled, those same locations may display the icon of a recommended app for your current location even if you don't already have the app installed. If this method seems a little too much like advertising, you can turn this off, or you can simply ignore these prompts if something unwanted pops up at an unexpected location.

Call and message forwarding

Consolidate communications on your iPad

SKILL LEVEL

Anyone can do it

IT WILL TAKE

5 minutes

YOU'LL NEED

An iPhone and an iPad running iOS 9, a Wi-Fi network and an iCloud account



It doesn't matter any more if your iPhone is in another room when you receive a call or a text message. You needn't rush to the iPhone to respond if you have another Apple device to hand because iOS allows your phone to forward voice calls and SMS and MMS messages to your iPad, iPod touch and Mac. We say 'forward', but in fact all of your devices will attract your attention, meaning there's less pressure on you to keep your phone on your person. It works in the opposite direction, too, enabling

you to initiate calls and send messages from those devices by routing calls and texts over Wi-Fi back to your iPhone.

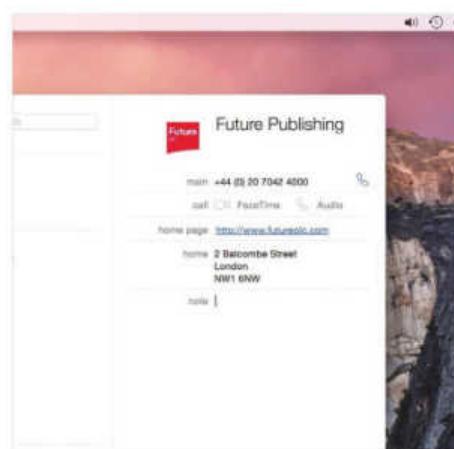
Like other Continuity features in iOS and OS X, there are a couple of conditions to meet in order that your iPhone can forward calls and messages to other devices. Those devices need to be signed into the same iCloud account as your iPhone, and they need to be connected to the same Wi-Fi network as your iPhone too.

Phone calls are forwarded to the FaceTime app on your iPad and Mac. This is automatically enabled for you, but you don't have to accept it on all of your devices, so it can be turned off. Conversations by SMS and MMS take place in the Messages app – see page 68 for more about it.

Your iPhone can forward voice calls and SMS and MMS messages to your other Apple devices



HOW TO | MAKE AND RECEIVE CALLS & SMS MESSAGES ON YOUR iPAD



1 Call a contact

To call someone you know, find them in the Contacts app. On iOS, just tap the phone icon next to their number. FaceTime opens to make the call. On a Mac, move the pointer over the number to dial, then click the phone icon that then appears. On a Mac, a call window appears at the top-right of the Desktop (see step 2). Both systems confirm the call is being made 'using your iPhone'.

2 Calls to other numbers

When Safari or Mail on an iOS device detects a phone number in text, tap it to open FaceTime and call it using your iPhone. On a Mac, move the mouse pointer over it, click the arrow that appears next to it, and select the option to call it. To manually call a number on a Mac, type it in the search bar in FaceTime's Audio tab and press , or on an iOS device simply tap the phone icon next to the number.

3 Turn off forwarding

To prevent one of your devices from ringing when your iPhone receives a call, pay a visit to FaceTime's settings. On the iOS device in question, simply go to Settings > FaceTime. In FaceTime on a Mac, go to the FaceTime menu, select Preferences... and then select the Settings tab. In both these places, switch off or untick 'iPhone Mobile Calls' to prevent calls being forwarded to that device.

Locate a lost iPad

Set up the free Find My iPad service to keep tabs on your device

SKILL LEVEL

Taking things further

IT WILL TAKE

15 minutes

YOU'LL NEED

iPad, iOS 9



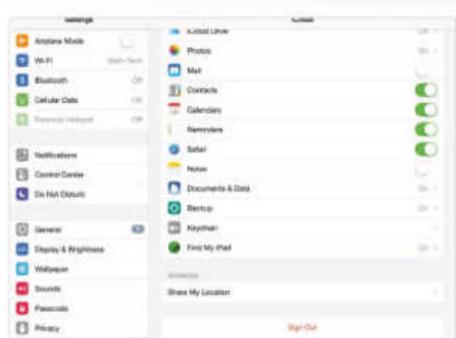
That moment when you realise you've misplaced your tablet can be a nightmare. But, thanks to some clever technology and the Find My iPad service, you can – in most cases – track down where it is. Using Wi-Fi networks and, on iPad models that have mobile network connectivity, phone masts and its GPS sensor, your iPad's location can be pinpointed worldwide with incredible accuracy.

So as long as your iPad is connected to the internet in some way – either via Wi-Fi or a mobile network, if supported – then

you can look up its location using a web browser or the Find My iPhone app on another iPad or iPhone.

If your device's location is available, it's then possible to make it play a sound (to help you find where in your house it's got to), display a message on the screen (so that an honest person who finds it can contact you) or even wipe its contents (if you decide it's gone for good) – this extreme option means it can't be reactivated without your passcode, so it's no use to thieves. Before you begin, set up a passcode lock in Settings > Touch ID & Passcode as a general precaution.

HOW TO | SET UP AND USE FIND MY iPAD



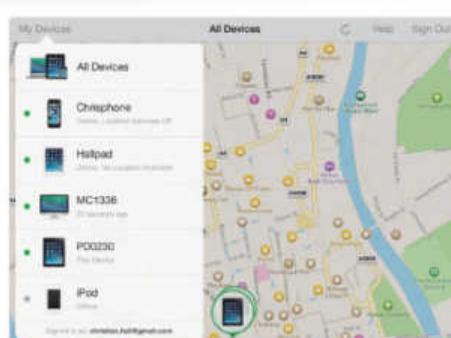
1 Enable the service

To start, you need to sign in to iCloud (see page 106) and switch on the Find My iPad service. Tap Settings > iCloud and turn on Find My iPad. This will link the device to your iCloud account, and you'll now be able to look up its location from another device.



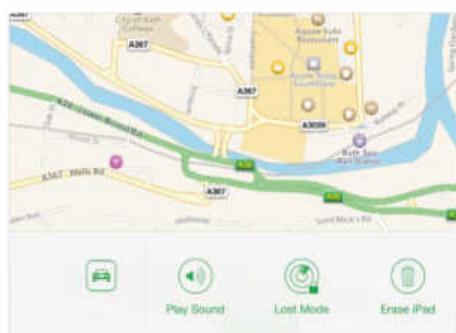
2 Find your lost tablet

If you do misplace your iPad and need to locate it, open the Find My iPhone app on another iOS device and sign in with your iCloud account. Alternatively, go to icloud.com on any computer, sign in, click Find My iPhone and wait a few moments as it tries to locate your tablet.



3 Device list

If you've got more than one device linked to your iCloud account, click All Devices for a list of them. Next to the row for your missing iPad, look for a green dot next to it, which indicates that its current location is available. Tap (or click) the device's name to see its location on a map.



4 Total wipeout?

Click the dot on the map or the name in the list and you'll get options to play a sound or erase the device – but use the latter only as a last resort if it's been stolen, because once you erase it, you'll no longer be able to track its location. It's better to begin with Lost Mode.



5 Lost mode

Choose Lost Mode and enter a phone number so the finder can call you. Tap Next, enter a message and tap Done. If your iPad is offline, it'll be locked next time it connects, and it will display your message. When you get it back, unlock it with your existing passcode.



If your lost device isn't connected to the internet when you try to locate it, you needn't keep checking back manually. Just tap or click 'Notify me when found'. You'll then receive an email when the device is located, plus a pop-up alert on any other devices linked to your iCloud account.

Maximise iPad battery life

Tips to help make your iPad go that crucial extra mile – or minute!

SKILL LEVEL

Taking things further

IT WILL TAKE

10 minutes

YOU'LL NEED

iPad, iOS 9

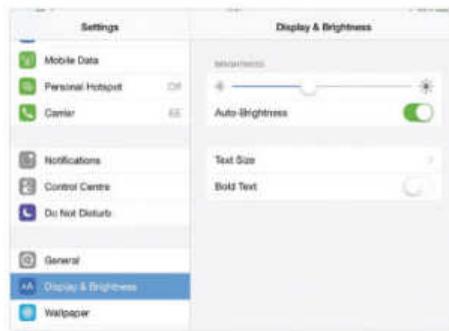
We've all been there: you're out on the road with only your iPad for company, when the battery runs out. Well, next time you see it getting low, there are several things you can do to squeeze out some extra battery life. The principle is to reduce the drain on your battery – the less you make it do, the longer it'll last.

There are various apps available on the App Store – some of them free, some paid-for – that claim to improve battery life, sometimes with astonishing claims of 'magical' boosts and the like. While many doubtless work up to a point, they

all pretty much automate the tips we share below rather than doing anything clever with the iPad's hardware or somehow tapping into any 'hidden' power.

Remember that while these tips are for the iPad, some will also apply to the iPhone and iPod touch. We particularly recommend enabling Auto-Brightness during general use and then switching to manual control under dark conditions, so you can lower the brightness to the lowest setting to conserve power – or something close to that if you find the lowest setting is just too dim to be practical.

HOW TO | IMPROVE BATTERY LIFE IN iOS 9



1 Dim the screen

The screen's backlight is one of the biggest drains on power. Tap Settings > Display & Brightness and turn off Auto-Brightness so the iPad's ambient light sensor doesn't cause it to ramp up. If you're really low on juice, turn the brightness down as low as is comfortable.



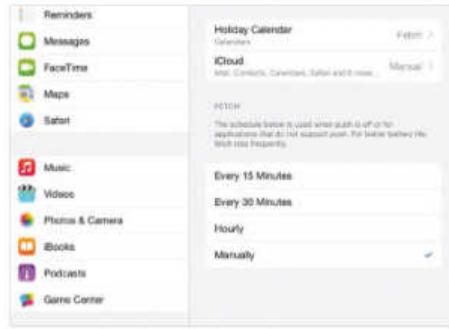
2 Disable 4G

Browsing the web over 4G (or 3G, if applicable) is wonderfully convenient, but it really takes a toll on battery life. If you're not using your mobile data connection (whenever you're in range of a Wi-Fi network you can use, say), turn it off under Settings > Mobile Data.



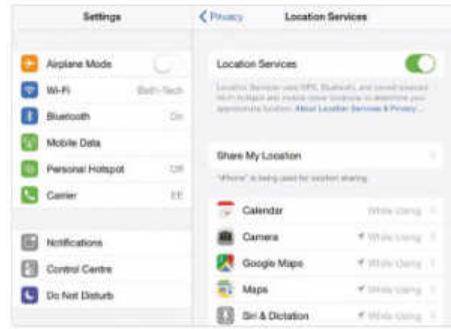
3 Stop pushing...

Knowing that a new email has come in can be useful, but it is not essential. This service, called Push, is another power-hungry feature. You can disable Push simply by turning off the eponymous switch in Settings > Mail, Contacts, Calendars > Fetch New Data.



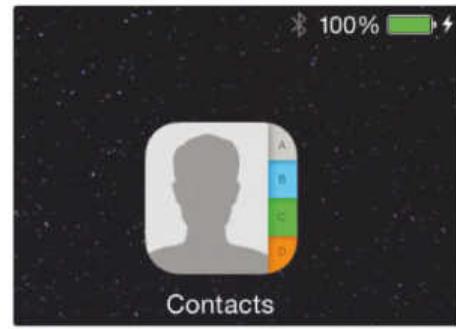
4 ... and stop fetching

In the same place as Push, set email accounts to check for new items every 15, 30 or 60 minutes or, ideally, manually when you open the Mail app. Also turn off Settings > General > Background App Refresh, either altogether or just for busy messaging and social media apps.



5 Location, location

Location Services is handy, but you can save battery power by disabling it, or at least managing which apps can use it, in Settings > Privacy > Location Services. (Note that some apps such as Maps and Weather, and the Find My iPad service may not function properly.)



6 Unneeded services

Lastly, is there a little angular 'B' icon next to the battery level indicator in the status bar? If so, this means Bluetooth is on, but if you're low on power and not actually using Bluetooth you can do without it. Open Control Centre and switch it off. AirDrop will be turned off by this.

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more information



Troubleshoot your iPad

Even an iPad can go a bit squiffy. Here's what to do if that happens...

SKILL LEVEL

Might be a bit tricky

IT WILL TAKE

30 minutes

YOU'LL NEED

An iPad, an internet connection



Apple has a reputation for creating reliable and robust devices, and this is especially

true of its iPad range. However, never forget that for all its sleek lines, an iPad remains a complex portable computer. It might not be as keen to keel over as the typical PC, but things still do go wrong.

In our experience, the most common issues are with regards to connectivity and misbehaving apps, both of which are covered within this tutorial. There are also more serious problems, which may require a restart, a restore, or even a trip to the Apple Store.

With the most extreme problems, you may have to perform a full

restore, and this means wiping all of the data from entire iPad. If you don't have a backup of your device, everything on it will be gone for good, and so make sure you make a backup! You can do so in iTunes: connect your device via USB, select it in the iTunes toolbar, click Summary in the sidebar, and then click Back Up. (Select 'Sync with this iPad over Wi-Fi to avoid using USB next time around.)

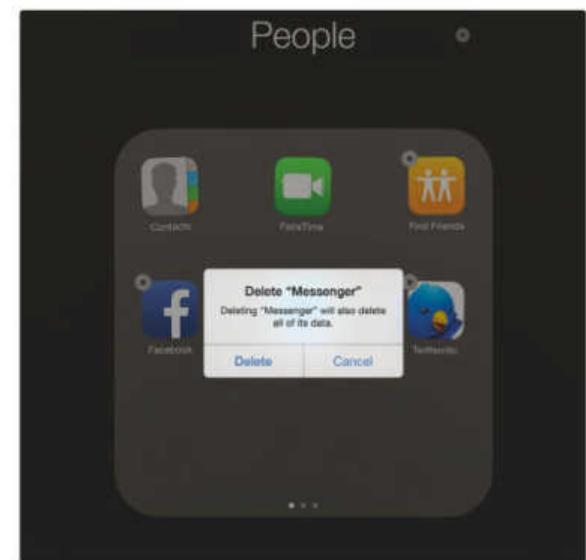
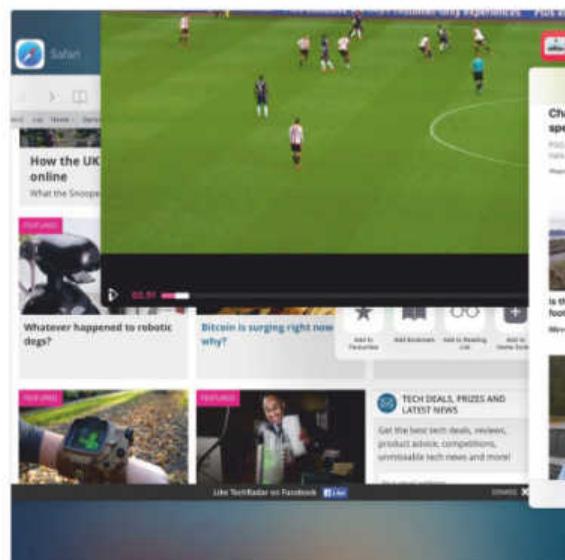
Additionally, we recommend that you back up to iCloud from day to day, because it's done automatically (see page 106 for details). If your iCloud storage is running low, think about upgrading to Apple's most affordable plans: are 79p/month (50GB) or £2.49/month (200GB).



HOW TO | DEAL WITH UNRULY APPS

TOOL SCHOOL

If your iPad loses its Wi-Fi connection and won't reconnect, try bringing up Control Center and turning on Airplane Mode, then turn it off again. Otherwise, restart the iPad, or try Settings > General > Reset > Reset Network Settings.

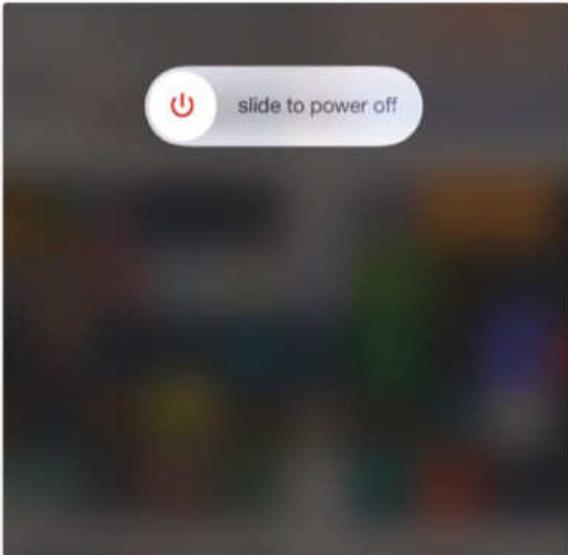


1 Force quit and restart

The most common problem you'll find with an iPad is an app or game playing up. If this happens the first thing to try is force-quitting it. Double-click the Home button and swipe sideways until you see the problem app. Swipe its preview screen upwards to quit it. Now relaunch the app. If this still doesn't fix things, restart your iPad and try again.

2 Update and reinstall

Apps are updated regularly, so check Updates in the App Store to see if a new version is available. Also, check its page to see whether the developer has left a note about any issues. As a last resort, tap-hold the app's icon on the Home screen, tap the cross, tap Delete, and reinstall the app. (Note: you will lose the app's data unless it saves to iCloud).

HOW TO | FIX MAJOR PROBLEMS**1 Turn it off and on again**

It's a long-standing joke within the tech world that turning it off and on again is the solution to any problem, but it happens to work quite often. Press and hold the iPad's sleep/wake button until the slider appears, then drag to turn the device off. Wait until it completely shuts down. Then press/hold the button again until you see the Apple logo.

2 Try a force restart

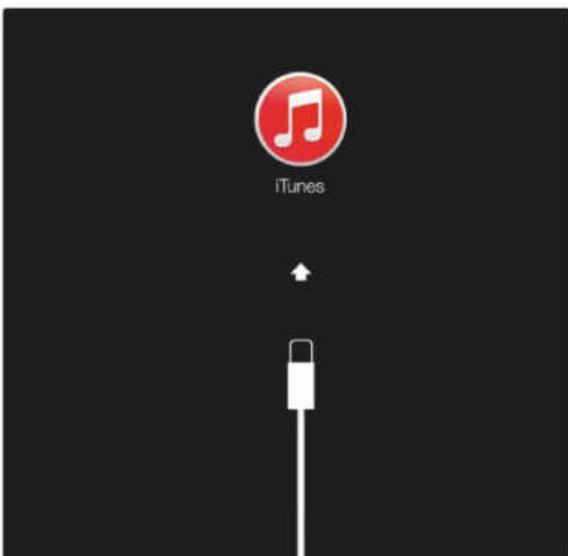
If your iPad is entirely unresponsive, it's worth checking whether it might be out of juice. If so, plug it in, wait for an hour and then try turning it on. If you know it's charged up (the screen's on but it's frozen and unresponsive), try a force-restart. Press and hold the sleep/wake button and the Home button until you see the Apple logo.

MANAGE STORAGE

Usage Storage

	Used	Available
Photos & Camera	190.0 MB	71.9 GB
Chords	7.1 MB	71.9 GB
oldbook	0.0 MB	71.9 GB

If your iPad gets full, it can cause problems, not least in apps being unable to update. Check usage in Settings > General > Usage > Manage Storage. Apps plus their data will be listed by size. Be on the lookout for games, social apps and magazines as candidates for deletion or content pruning.

**3 Reset and restore**

Your last resort is a complete iPad reset and restore. Connect the iPad to your Mac via its USB cable, open iTunes, and click the iPad's icon. Click Summary, then Restore and confirm. iTunes will download iOS, and you can restore your data from a backup. (If the iPad is frozen, hold Home as you connect the USB cable until you see Connect to iTunes).

**Get support for Apple products.**

When you need hands-on technical support for your Apple products, you can get friendly, expert help at the Genius Bar.

4 Call in Apple

If your iPad still isn't working, book a Genius Bar appointment at your local Apple Store. For iPads under two years old, EU consumer law should cover a straight swap for any model that cannot be repaired and was not physically damaged. For extra peace of mind, consider AppleCare+, a £79 option which offers additional help and support.

JARGON BUSTER

If your iPad is unusually silent (despite having the volume high), a restart often fixes things.

In rare cases, dust can get into the audio port. Plugging in and then removing headphones a few times usually does the trick.

Creative photo editing

Do more with your pictures using the excellent and affordable Pixelmator

SKILL LEVEL

Anyone can do it

IT WILL TAKE

30 minutes

YOU'LL NEED

Pixelmator, an iPad and some photos



The Photos app on your iPad provides a handful of useful editing tools, enabling you to make basic tweaks to your photos. You can crop and rotate an image, apply a selection of preset filters, dial in brightness and saturation... and that's about it. If you want to get creative with your imagery, Pixelmator is your ideal

next step. This fast, easy-to-use and affordable image editor provides a raft of tools, including brushes and layers, text and shapes, retouching, distortion and more. It's great for taking your photos to another level – or even creating an image from scratch.

The app is simple to use, with all the tools accessible from a few menus. It plays nicely with the Photos app,

loading images directly from your photo library and Camera Roll, and you can even link it to the Photos app, enabling you to make basic edits there, and then take your photo directly into Pixelmator. This workflow limits you to using Pixelmator's Effects menu, although you still have plenty of creative freedom. Tapping Done sends you back into your iPad's Photos app.

VISUAL GUIDE | FINDING YOUR WAY ROUND PIXELMATOR

Pixelmator has a clean look that's right at home on iOS, making it easy to use

Icons

1 The paintbrush icon brings up the main Tools palette with access to the app's creative tools. The + icon enables you to add images, layers, text and shapes. The cogwheel brings up the app settings and also includes image setup. The share icon lets you save and share your images.

The Tools menu

2 This is the main access point to Pixelmator's toolset, which features brush-based tools, colour adjustments, a variety of effects, plus tools for creating selections and cropping. Format provides additional control over individual layers.

The layers palette

3 Pixelmator comes with a fully-formed layer system, which enables you to duplicate images, overlay effects and add text and shapes. Tapping a layer also brings up a menu for additional control over opacity (how transparent or not a layer is). Plus blend modes and context-sensitive options such as stroke, drop shadow, reflection and so on.



Add Effect presets

4 Tapping the Add Effects menu brings up a palette of 14 different options, including Blur, Sharpen, Hue & Saturation, Light Leak, Bokeh, Focus and Kaleidoscope, all with their own controls. The Add Effects menu also offers a small, live preview of your image with each effect applied, so you can see what your image will look like before you set about making changes.

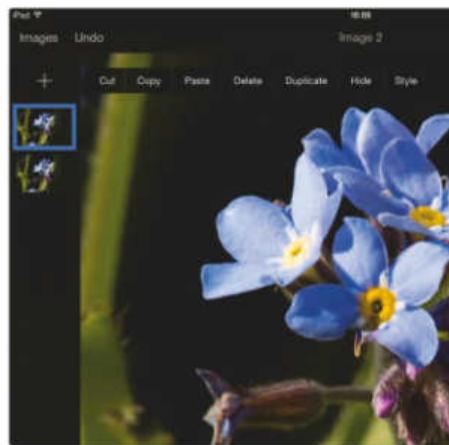
Images

5 Tap here to close the current image and go to Pixelmator's Image Gallery. This enables you choose a new image to work on: this can be from scratch, from iCloud Drive or from the Photos app. You can also use Images to open an existing project (images are saved with layer information intact). You can also use Images to rename or delete existing files.

Undo

6 Pixelmator has a whopping 50 levels of undo available, enabling you to experiment freely, knowing that you can always backtrack through your work if you need to. Of course, with the layer system it's always wise to save a copy of your image as a standby just in case you do happen to run out of undos – although that's only likely to happen with very complex images.

HOW TO | LOADING, USING LAYERS AND ADDING EFFECTS



1 Load an image

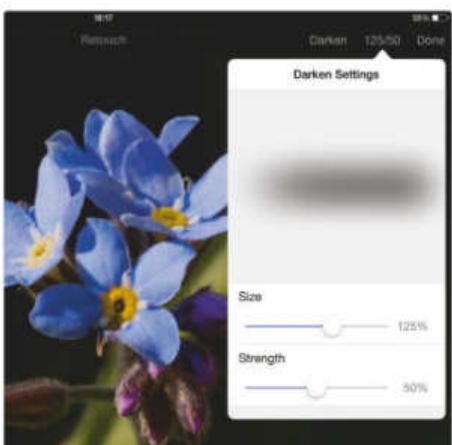
Time to boot up Pixelmator and load an image. There are a variety of ways of getting digital photos onto your iPad: You can load them from your camera via USB and an adaptor. You can also sync or share them using iTunes, My Photo Stream, iCloud Photo Sharing, iCloud Drive and even Dropbox. We also suggest Files App (<http://getfilesapp.com>), which is useful for sharing files between iOS and OS X. In Files App simply use 'Open in...' and choose Pixelmator.

2 Image setup

We've chosen a macro shot of some flowers – it's an OK image but lacks interest. You have the option of using Image Setup to define the size in pixels, or you can tap once on the image to bring up handles to manually resize it and pan around the canvas. To rotate, just place two fingers on either side and move them in opposite directions. Once you have the image set up as you'd like, zoom in and out and pan around with finger-pinches and by dragging.

3 Duplicating a layer

Even though Pixelmator has an undo feature, it's useful to make a duplicate layer to work with. Tap anywhere on the image and hit Duplicate. Now if you swipe in from the left, you'll see the layers. The new layer has been created and sits on top of the original with a blue outline. To reorder layers, tap and hold, then drag them to their new position. To cut, copy, delete or hide a layer, tap to highlight it, then tap again to bring up the layer menu.



4 Retouching the image

Let's bring out the blue flowers and darken the green stem. Tap the paintbrush icon to bring up the Tools menu, hit Retouch and select Darken. This brings up a brush with which to paint over specific areas. To adjust the size and strength, tap on the numeric values (top-right); this brings up a menu showing the brush stroke. Always start with low strength values until you get a feel for what the tool does. Next we'll do the same thing, but using the Saturate brush to make the blue petals more vivid.

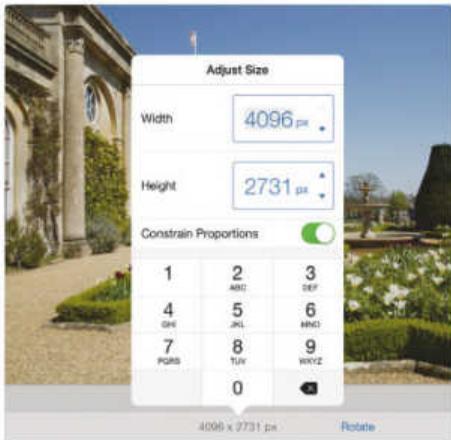
5 Adding effects

Hit the + symbol (top-right), and in the second tab, select the dark rectangle to add a solid black layer. In the layers panel, tap it, select 'Style' from the menu and change the Blending from Normal to Screen. Now we can see the flowers again. Open the Tools menu and tap Add Effects; this brings up a menu of 14 options for adding blur, bokeh and more. We're going to use the Bokeh menu to add a sparkly, ethereal vibe. Use the two black handles to position, rotate and scale the Bokeh image to your liking.

6 Using Blending modes

Hit Done to apply the effect, then tap the black layer which has the Bokeh image. In the menu, tap Style and adjust the Opacity to around 50%. You can also play around with the Blending modes – Color Dodge also gives a nice effect in this instance. To finish the image, we added another Bokeh layer, called Magnolia, then reduced the opacity and added a Blur effect. This brings up a small wheel, which you dial up or down the amount of blur. We then added a Hue & Saturation effect.

HOW TO | CREATING A VINTAGE PHOTOGRAPH



1 Changing image size

We've copied a 4096x2731-pixel photo using Dropbox, and our first step is to make it more manageable. To alter the size, tap the cogwheel to bring up the Settings panel, then hit Image Setup. At first it doesn't do anything: you need to tap the text saying 4096x2731 – this opens the Adjust Size panel. Here you can key in any size you need, and constrain its proportions if need be. We're going to reduce it by half. Once you're happy, tap anywhere off the panel to close it, then hit Apply.

2 Cropping the image

For our vintage-look image, we need to make some changes. There are people dressed in contemporary clothing on the right and a guy by the pillar. Let's get rid. First of all, it's easier to just crop the family from the edge of the image; to do this tap the Paintbrush icon and select Crop. You can drag the crop window around or adjust it using the handles in each corner, or by dragging on an edge. You can keep the original aspect ratio or choose a different one using the Aspect Ratio options at the bottom.

3 Using the retouch tool

Now to deal with the guy in the red top using Pixelmator's intelligent retouching tool. Tap the paintbrush icon to open the Tools panel and select Retouch. To start, we'll try using the Repair tool. Like the other brush tools you can adjust the size by tapping the numerical values. We'll zoom in on the image, and use a fine brush to paint over the figure. It's a good idea to cover the figure in one go. However we did one main paint stroke, then some smaller ones to remove any bits we'd missed. Tap Done to close the tool.



4 Cloning in details

The Repair tool has done a pretty good job, but we can improve it by cloning in any missing detail. Open the tools palette again, open the Retouch options then select the Clone tool. Place the black marker at the end of the 'rope' where you want to copy from, then simply paint where you want to copy to. Here we've duplicated a few bushes to tidy up the area by the pillar. We also cloned out the entrance sign and painted in some new gravel. We even manage to remove some of the people by the fountain with the Repair tool.

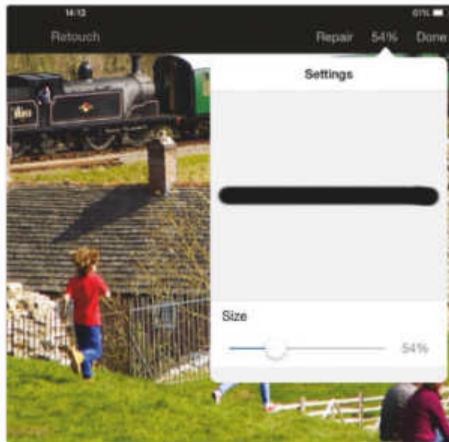
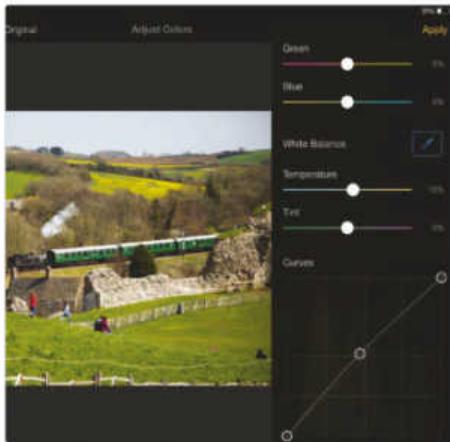
5 Colour correction

Now let's make the photo look aged. You can give it the popular 1970s Polaroid look by going into the Tool palette, and tapping on Adjust Colors; the Sepia preset does a pretty good job on its own. However we want a look that's even older. First we'll add the Warm preset and then decrease the Saturation level slightly, and increase the Contrast. Hit Apply, then go into Add Effects and use the Hue & Saturation to give the photo a faded brown-purple tone. To control individual colour channels, tap the colour dots at the bottom. Hit Apply once done.

6 Add the final touches

Staying in the Effects menu, we then apply a Vignette effect with a value of 150%. Next we'll add a new solid black layer set to Screen mode. This is so we can apply Light Leak effects and some speckles, and tone down their colour and saturation separately. Now we'll add the 'Blurry' frame template. To use it, we had to save our vintage picture to back to Photos. In Pixelmator's gallery, hit the + icon (top-left), and from the Create Image menu select the frame you want. Tap the + icon (bottom-right), and import your edited image into the frame.

HOW TO | CREATING A TILT-SHIFT EFFECT



1 Adjusting the colour

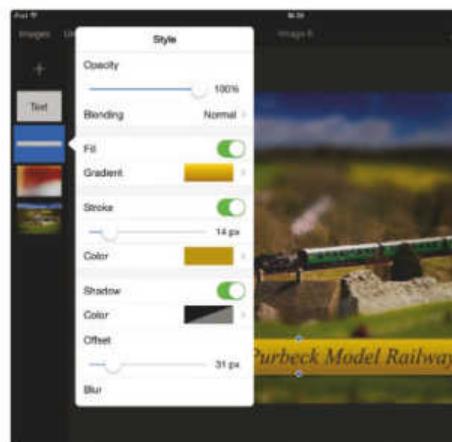
First, we'll load our train photo. The scene was shot on a bright sunny day, but it's a little flat for our purposes, so open the Tools panel and select Adjust Colors. We want the image to be vivid and 'hyper-real', so let's increase the Contrast and Saturation by 20% each. Then move the Temperature slider by 10% to warm things up a bit and tweak the curves to brighten the midtones. Tap Apply. If you're not confident with colour channels, the Vibrant preset in Adjust Colors will do much the same thing.

2 Object removal

For our tilt-shift photo, let's tidy things up a bit by removing the kids running down the bank – these will look too much like real people and will distract the eye from the train. In the Tools palette, select Retouch and then the Repair icon. Using a smallish brush, paint over each figure, making sure to completely cover them. Pixelmator does a good job in removing them from the scene – fortunately, these areas will be blurred in the final image, so there's no real need to use the Clone tool to tidy up.

3 Replacing the sky

Our sky is a bit boring, so we found a nice replacement and added it as a layer beneath the steam train. We then used the Tools > Select > Magic Wand to select our original sky. The region gradually turns grey as you move your finger, so you can gauge how much to select. It's then easy to pick an Erase brush and paint out the sky. To check your progress, Hide the layer beneath to see the alpha channel. Now to work on both layers as one, tap and hold the sky and drag it on to the train layer to group them.



4 Add the tilt-shift effect

For the tilt-shift effect, go into the Tools palette and select Add Effects > Miniaturize. There are two black handles: the large one shows the 'focal point', while the smaller one determines the extent of the effect. We want a narrow depth of field, so let's put the focal point on the train, keep the handles close together and crank it up to 100%. To make even the effect more extreme, we apply the effect again. You could also duplicate the layer and apply the effect to the uppermost version – then dial back the opacity if it's too much.

5 Vignetting and noise

Our image is nearly complete. In Tools > Add Effects, we'll throw on a Vignette set at 70%, which helps sell the tilt-shift effect and draws the eye to the centre. Next we'll add some Noise set at 10%, just to add a little grain and tie the whole image together. Finally, we'll add another solid black layer, and apply a Light Leak (the one titled Pavo). With the layer set to Color Burn and 20% opacity, it adds a bit of richness and texture to the image. If you choose to apply the effect as a separate layer you can easily tweak and change it to your heart's content.

6 Adding shapes and text

Finally, let's add some text and a graphic. Pixelmator has a selection of shapes and text, added via the + icon (top-right). You drag the item into position and then scale it with the handles; text is edited by tapping on the text box. You can make further refinements by selecting the item in the layer palette, and tapping Styles. This shows a menu with options for colour, outlines, drop shadows, and so on. Your finished image can be shared via Messages, Mail and iCloud Photo Sharing; opened in another app, saved to iCloud Drive or Photos.

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Get started with GarageBand

Turn your ideas into tunes with Apple's amazing music-making software

SKILL LEVEL

Anyone can do it

IT WILL TAKE

30 minutes

YOU'LL NEED

An iPad and GarageBand



GarageBand is a truly exceptional app. It's simple enough for absolute beginners to use – we've

seen toddlers make music with it, although 'music' is maybe being a bit too kind – but powerful enough for professional musicians. It's a brilliant songwriting tool, a cool way to make your own podcasts, an excellent

ringtone creator and a surprisingly useful and powerful recording studio that can go anywhere your iPad goes. We like it a lot: we think you will too.

In this tutorial we'll keep things simple by making a basic song from a drum loop, GarageBand's own virtual instruments and our iPad's microphone – but GarageBand can also work with external instruments and microphones

via hardware such as the iTrack Solo, which connects proper mics and instruments to any iPad. It also works with many third-party apps, so for example you can use a dedicated guitar effects app or use a third-party synthesiser to get spooky and record that audio in GarageBand. No matter what kind of music or audio you want to make, GarageBand can handle it.

VISUAL GUIDE | GET TO KNOW GARAGEBAND

GarageBand has a clear, intuitive interface to help you control your instruments

Navigation

1 At the top left of the screen you'll find My Songs, which takes you to the opening screen and any songs you've recorded, Instruments, which as you'd expect takes you to the instruments, and Undo, which undoes whatever you've just done. We use that last one a lot, especially when we're experimenting with loops.

View switchers

2 These two icons enable you to switch between GarageBand's two views: instruments, where you do the performing and recording, and the song view, which is shown in this image. Song view is where you turn your recordings and loops into a finished song, and it's where you'll adjust track volumes and special effects.

Song controls / volume

3 The icons here stop, play and record. When a song or track is playing, the volume control immediately to the right shows the volume of the left and right speakers. You don't want to see the red tips too much here, as that means you've



reached full volume. The occasional red bit is fine, though.

Song and track settings

4 These icons turn the metronome on and off, enable you to add Apple Loops to your song, provide you with controls to change the way individual tracks sound and enable you to change the speed, key, time signature and overall sound of the

entire track. There's also a handy help button that explains what does what.

Track controls

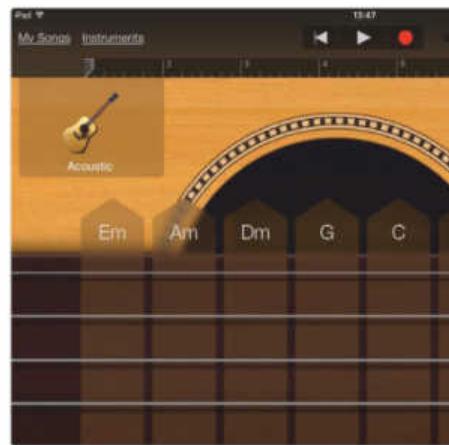
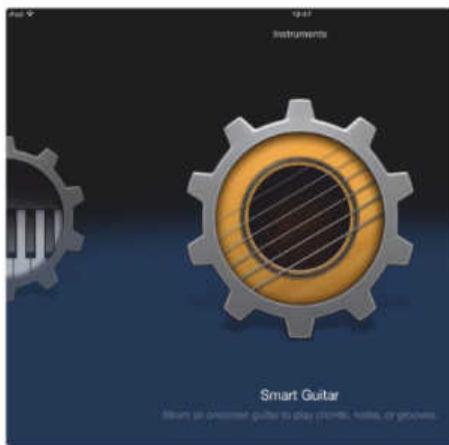
5 These controls are hidden by default to maximise your working area, but you can slide them out by dragging them from the left hand side of the screen. They enable you to mute a track – silence it – or solo it, which silences everything else; you

can also change the volume of individual tracks from here.

Instrument tracks

6 This is your music. Each horizontal section is a track containing a single instrument. The colours indicate what kind of instrument: green is an electronic/virtual instrument that uses MIDI data; blue is an audio file such as a vocal you've recorded.

HOW TO | MAKE YOUR FIRST SONG IN GARAGEBAND



1 Create a new song

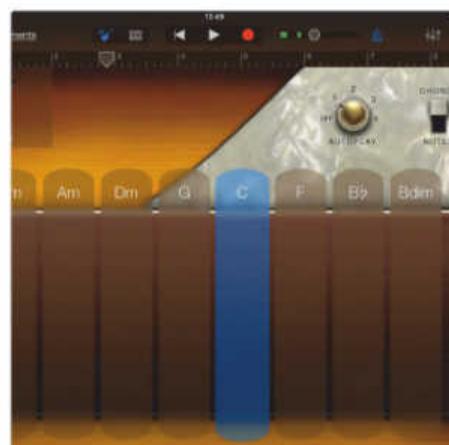
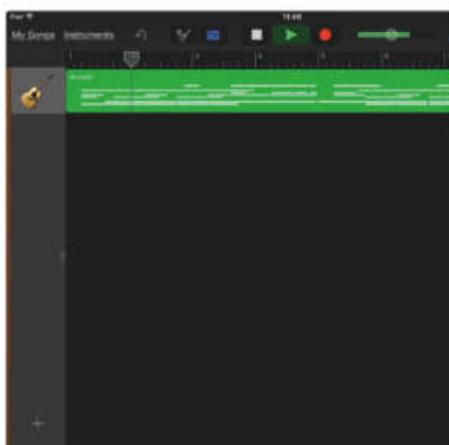
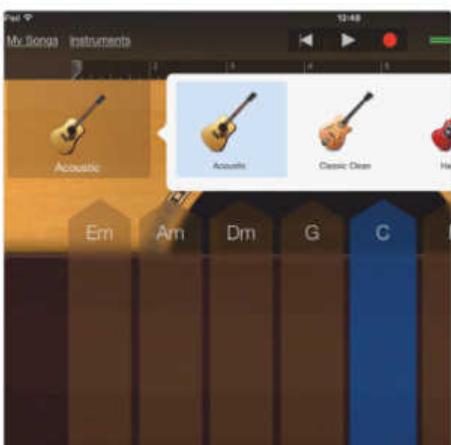
When you launch GarageBand, the opening screen will display thumbnails of your various music projects – but as you don't have any yet, this screen is currently blank. Tapping on the big GarageBand icon in the centre of the screen will take you to a brand new song, ready for you to turn your ideas into a tune. It's a good idea to make sure your iPad has had a decent charge beforehand, because recording music can be quite hard on the battery.

2 Choose an instrument

The first thing you'll be asked to do is to choose an instrument. GarageBand's Smart Instruments are superbly clever, as you can use them in two ways: you can play them yourself by tapping the appropriate bits on the screen, or you can get GarageBand to play them for you. That's really handy if your ambition exceeds your playing ability. In this example, we'll start our song with a little bit of acoustic guitar. Tap Smart Guitar to continue.

3 Have a strum

Looks familiar? Whatever instrument you choose, GarageBand does a pretty good job of reproducing it on screen. To play a note, just tap the appropriate bit of the string; to strum, just swipe your finger or thumb across the strings. You can't play a bad note in the Smart Guitar: GarageBand automatically chooses appropriate chords for the current key, and if you'd like to change that you can do so by tapping the spanner icon at the top right of the screen.



4 Change instrument

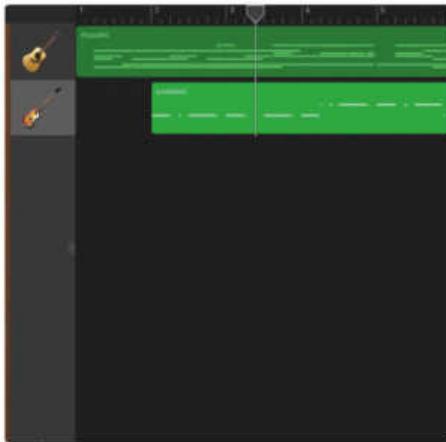
Each Smart Instrument comes in several versions: the keyboards offer realistic pianos and sci-fi synthesisers, the strings offer a range of bowed instruments and the Smart Guitar offers a selection of acoustic, semi-acoustic and electric guitars. To change instrument, tap on the currently displayed one towards the top left of the screen and you should now see the pop-up options shown here. The rock guitar instruments even come with effects pedals to add a bit of grunt to the sound.

5 Record a pattern

To record your playing, either strum or tap the strings yourself or experiment with the Autoplay button. This action gives you four different strumming patterns, and all you need to do is tap the appropriate chord when you want it to play that chord. When you're ready, press the red button to record. You'll get a four bar count-in and then it's time to start playing. It'll keep repeating until you're happy; when you think you're done, press the Stop icon and then tap on the Song icon.

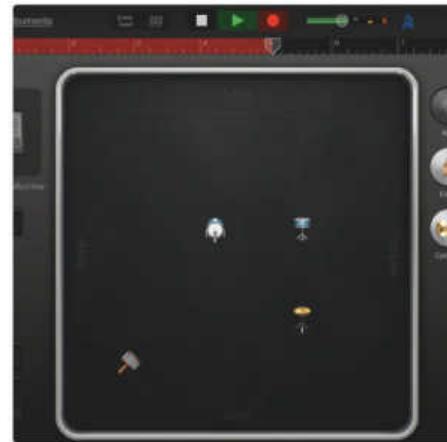
6 Add another instrument

You should now see a green pattern on the screen. That's your guitar track! Now let's add another instrument to the mix. Tap on the big plus sign at the bottom left of the screen and choose another instrument (or another Smart Guitar, if you fancy doubling up). We're going to add some bass, so we'll start by tapping on Smart Bass, choose the Liverpool bass sound and rely on Autoplay set to 1. The buttons are as before, it's red to record, Stop to stop and the Song icon to see the song.



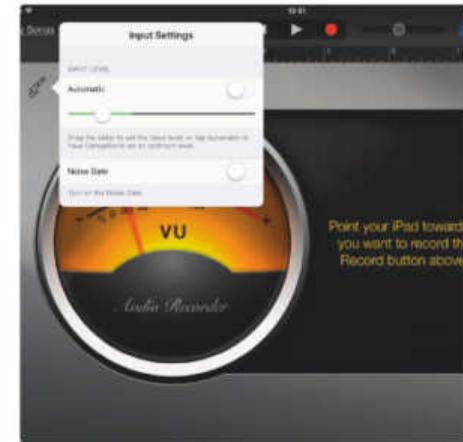
7 Add percussion

As you can see, we now have two green patterns. The pictures at the left show us what's what: the top pattern is our acoustic guitar, and the second one is our bass. You can move the patterns around by tapping, holding and dragging them, but in this case we want our guitar to play the intro before the bass comes in. Let's add some drums now: tap on the plus sign and then choose Smart Drums from the available instruments.



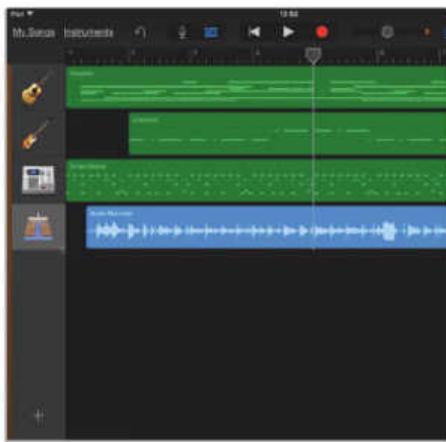
8 Record a drum pattern

Smart Drums can be a lot of fun, and they're much easier to 'play' than the replica drum kits that GarageBand also provides. To create a pattern, drag a piece of drum kit – a kick drum, or a snare – into the centre and then move it around. Move up to make it louder, right to make it more complex, down to make it softer and left to make it simpler. Once again, it's the red button to record and Stop to stop. Do a bit of experimenting!



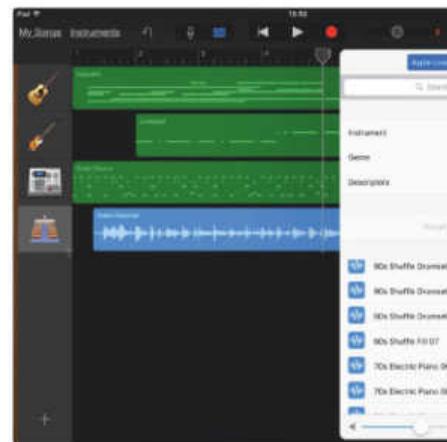
9 Record some vocals

Let's add some vocals. To do that, we need the Audio Recorder – and we need to tap on the image of a jack plug at the top left to get the right input level. The Noise Gate option is useful for vocals, because it mutes the sound when you aren't singing, rapping or otherwise talking. You can also connect an external microphone or instrument if you have the appropriate iPad connector to do so. Try recording some vocals now.



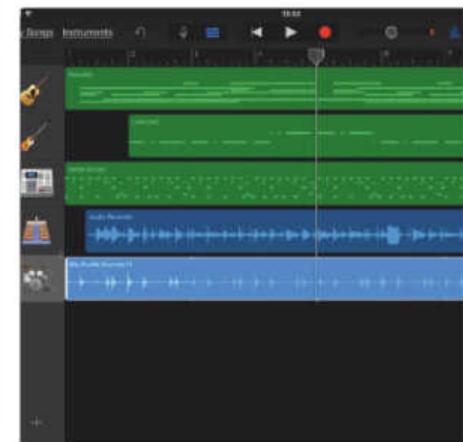
10 Note track colours

If you go back into the song view, you'll see that this time the recording you just made is displayed in a different colour. That's because this time you've made a sound recording; the other tracks are stored as MIDI information. That information is editable, and you can take your MIDI data and play it on an entirely different electronic instrument. MIDI's really handy if you're exporting your song to a pro-audio app such as Apple's Logic Pro X.



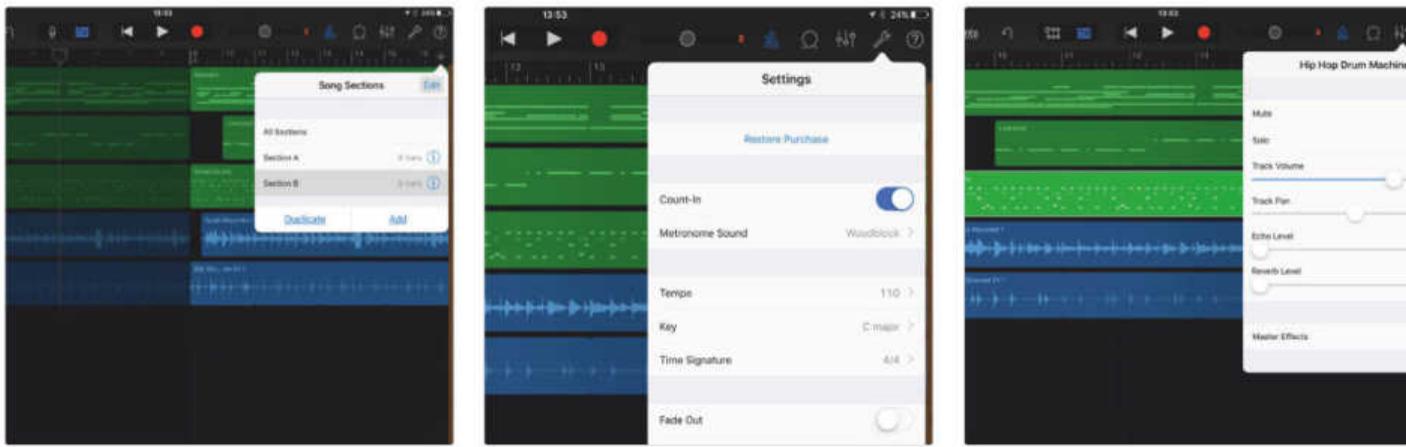
11 Add some loops

There's another way to get music into GarageBand called loops. Loops are short bits of music that you can repeat, or loop, so for example you might take four bars of drums and loop them throughout the song. Rihanna's producers did that with GarageBand for the song 'Umbrella'. To use loops yourself, tap on the loop icon towards the top right of the screen and tap on a loop to preview it. If you like it, drag it onto the song view.



12 Loop a loop

Moving or looping a loop in GarageBand really couldn't be simpler: press, hold and drag it to move, or tap and hold on the right-hand edge and then drag the edge to make the loop repeat itself. In this image we've taken a drum loop and essentially repeated it four times; if you look carefully at the outlines you'll see little indents in the top and bottom edges. Our loop is two bars long and we've looped it to make it eight bars long.



13 Duplicate or add

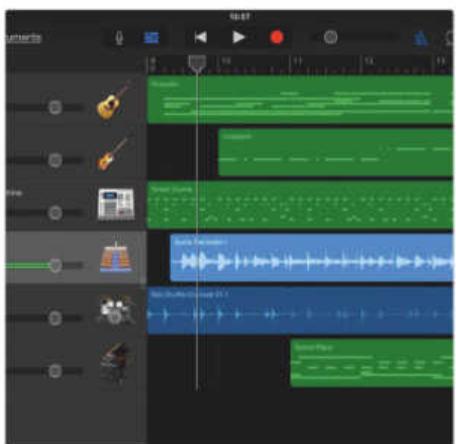
Until now we've just been working on the first eight bars of music, but we can add to that by tapping on the plus icon towards the top right-hand corner of the screen. This gives us two options: we can duplicate our song section, which adds a perfect copy of the existing section that effectively doubles it in size; and add, which adds a new, blank section. By default sections are 8 bars long, but you can easily change that by tapping Edit.

14 Song settings

There are a few other tricks up GarageBand's sleeve. If you tap the spanner-shaped Settings icon, you can change the tempo (the speed of the track), the key and the time signature, and you can also specify whether GarageBand should make your song fade out towards the end. You can Airplay your audio over Bluetooth to an Apple TV, or you can use Jam Session to play along with other GarageBand users if they're in the same room.

15 Track settings

Once you've recorded or arranged your various bits, you'll want to mix them. If you click on the faders icon just next to settings, you'll now see options for the currently selected track. Mute turns it off, Solo turns off everything but the track, and volume, pan, echo and reverb change how the track sounds and where it sits in the stereo image. Anything you select by tapping Master Effects will apply to the entire song, not just the current track.



16 Mute, solo, volume

If you pull the divider from the left of the screen you'll see that alongside each track icon are some controllers: these are mute, solo and volume. When you're mixing your song to make it sound as good as possible it's handy to have those controls to hand so you can make quick changes as you go along. And if the tock-tock of the metronome is annoying you then there's nothing stopping you from turning it off by tapping the blue metronome icon at the top.



17 Send to iCloud

GarageBand saves all of your songs to your iPad's own storage, but if you like you can upload it to iCloud instead. That's good for several reasons: most importantly, it means you've got a backup of your masterpiece; it means you can open the song on another iOS device such as your iPhone; and once it's in iCloud you can import it into Logic. To do upload it, tap on My Songs > Select and select your song. Now tap on the iCloud icon.



18 Export options

In addition to iCloud storage, there are more possibilities under the Share icon at the top left. From here you can export your song to iTunes, turn it into a ringtone, add it to Apple Music or share it via Mail or social media. Those options will convert your song into an AAC file of the same kind iTunes and Apple Music use. Don't delete your GarageBand original, though, as that's the only version of your song that you can edit.

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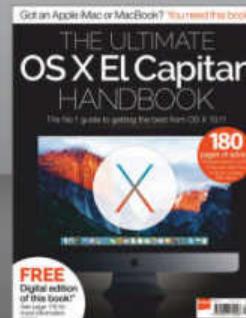
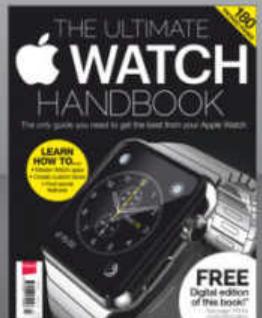


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